ENVIRONMENTAL AND SOCIAL SAFEGUARDS

This document focuses on the requirements for environmental and social safeguards. It aims at increasing the likelihood that each project will comply with the environmental and social safeguards set out in the World Bank Safeguards Policies by adding clarity, providing further technical guidance, and recommending good practices in the implementation of the safeguards policies.

The safeguards policies requirements for environmental and social safeguards support the integration of environmental and social considerations into project decision making process. They are triggered if a proposed project is likely to have environmental and social impacts and risks to the physical, biological, socioeconomic, and/or physical cultural resources in the project’s area of influence. Socioeconomic factors include potential impacts on livelihood through environmental media, health and safety, vulnerable groups, and gender issues.

To comply with the safeguards policies requirements, it is crucial for proponents to take note that environmentally and socially sustainable projects are primarily achieved through a good project design during project preparation and effective environmental and social risk management during project implementation.

1. GUIDELINES ON GENERIC IMPACTS AND RISKS ON BLUE BOND FUNDED ACTIVITIES
2. **GENERIC POTENTIAL ADVERSE IMPACTS AND RISKS OF AQUACULTURE SUB-PROJECTS**

| **IMPACTS AND RISKS** | **MITIGATION MEASURES** |
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| Geology/Hydrogeology:* Interruption or disruption of surface and groundwater flows from construction, excavation and ground clearance.
* Reduced flows or lowering of water table due to abstraction, possibly resulting in salinization.
 | * Design to take account of local hydrological conditions (e.g., avoid crossing permanent waterways, do not hamper drainage of surface water, avoid works in areas prone to flooding especially during rainy season).
* Limit sealed or compacted areas as much as possible, to maintain natural recharge of the water table.
* Water study prior to any abstraction, to inform a Sustainable Water Management Plan.
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| * Disruption of coastal processes (e.g., wave, tidal and current regime, sediment transport, flood and storm protection) due to inadequate siting of project.
* Saline intrusion into groundwater due to excessive abstraction of groundwater during operation.
 | * Siting and design to take account of shore configuration, currents, groundwater flows, and existing habitats.
* Design and construction of compensatory shore protection and other measures to maintain coastal processes.
* Monitoring of groundwater salinity; where necessary further mitigation may include control/diversion structures for saltwater, installation of cut off wells, sourcing of alternative water supply.
 |
| * Pollution of groundwater from discharges and accidental releases during construction and maintenance, and from wastewater during operation.
 | See Pollution of Soils and Water below |
| Soils, Run-off and Flooding:* Loss, damage or disruption of soil/sediments during construction and maintenance.
 | * Minimization of cleared areas and soil disturbance, with revegetation as soon as feasible (with native species).
* Early installation and regular maintenance of drainage and diversion structures, silt traps, etc.; drainage outlets to discharge into vegetated areas if possible; vegetation along watercourses and drainage lines to be retained if possible.
* Retention of topsoil for restoration (including tilling and revegetation) as soon as practicable.
* Careful consideration of timing of works (overall duration and seasonality).
 |
| * Introduction of sediments to coastal waters or inland watercourses, or interruption of drainage patterns, as a result of ground clearance, earthworks and operational maintenance of systems.
 |
| Pollution of Soils and Water:* Pollution of coastal waters or inland watercourses from operational wastewater (e.g., nutrients, pesticides, fertilizers, treatments), as well as from fish processing and workforce sewage.
 | * Reduce nutrient and chemical inputs to water, e.g., through use of biological pest control methods.
* Ensure that waste and drainage water complies with discharge standards and treat accordingly.
* Implementation of standard good wastewater management and disposal procedures.
* Installation of sewage treatment to meet required standards; hygiene training for workforce.
 |
| * Release of hazardous substances during construction or maintenance (e.g., accidental spills and leaks) leading to soil, surface or groundwater contamination.
 | * Materials handling and control procedures, use of storage and containment equipment meeting international standards.
* Control of construction vehicle movements and prohibition of vehicle washing in watercourses, and similar practices.
* Emergency response plans during construction (contractors and local authorities) and operation (local authorities).
 |
| Air Quality:* Dust and emissions from construction and maintenance activities, could affect human health, vegetation and wildlife.
 | * Sensitive site selection and siting of construction and processing facilities.
* Use of modern equipment meeting appropriate emissions standards, and regular preventive maintenance.
* Dust control and suppression measures, such as dampening, use of vegetation hedges.
* No use of ozone depleting substances during construction.
* Use of appropriate solid waste disposal facilities.
 |
| * Odours associated with preparation facilities may have nuisance value for nearby receptors.
 |
| Noise and Vibration:* Noise and vibration from construction and maintenance equipment, traffic and activities may disturb sensitive noise receptors (human, fauna, including underwater noise impacts on fish and marine mammals, e.g., from piling during construction).
 | * Sensitive local route selection and siting of facilities, accompanied where necessary by noise attenuation measures.
* Use of modern, well maintained equipment fitted with abatement devices (e.g., mufflers, noise enclosures).
* Use of sensitive construction methods, e.g., “soft start” or “slow start” piling.
* Strict controls of timing of activities, e.g., blasting and other high noise emissions; prohibition on night working.
* Observance of seasonal sensitivities (e.g., breeding seasons), and alteration of activity to reduce noise levels at that time.
 |
| Resources and Waste:* Abstraction of significant volume of water from surface or ground water sources for supply to aquaculture system may affect supply for human communities and ecosystems.
 | * Abstraction to take place with approval of relevant authorities at all locations.
* Water study prior to any abstraction, to inform a Sustainable Water
* Management Plan.
* Regular preventative maintenance of all system components to ensure that water wastage is as far as possible limited.
* Promotion of water efficiency (including leak detection) and water recycling.
 |
| * Inefficient waste management during construction, operation and maintenance leading to excess consumption of materials, generation of wastes/emissions, pollution of soils and water; in particular, impacts of wastewater contaminated with nutrients and chemicals.
 | * Preparation of Waste Management Plan following the waste hierarchy, supported by staff training
* Earthworks to be designed to achieve a balance between cut and fill wherever possible
* Use of authorized contractors for hazardous and any other wastes which the project cannot dispose of safely.

See Pollution of Soils and Water above |
| Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways:* Site footprint and earthworks during construction or maintenance causing loss, degradation or fragmentation of protected or ecologically sensitive areas (e.g., wetlands, migration routes), and other areas of conservation interest; and degradation following poorly managed rehabilitation.
 | * Careful siting of all project components, with advice from biodiversity authorities/wildlife specialists, to avoid those which are most sensitive and provide priority ecosystem services (e.g., mangroves for coastal aquaculture).
* Wherever feasible, establishment of buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive and avoidance or minimization of activity within these zones.
* Use of design and operational measures to maintain fish migration routes wherever possible.
* Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value, using specialist advice and input so as to maintain the integrity of the habitat, backed up by a long-term monitoring program and corrective actions as necessary.

Where development in sensitive areas cannot be avoided, mitigation may include:* Minimization of area impacted, clear demarcation of remaining intact areas of habitat, and prohibition of activity into those areas for any purpose; prohibit or minimize activities in vicinity of sensitive areas, e.g., fragile coastal habitats, upstream of these intact areas of habitat.
* Habitat rehabilitation and ecosystem restoration of areas no longer required to occur as soon as possible after construction.
* If loss of Critical Habitat is inevitable, development/implementation of an Offsets Programme.

See relevant sections re: control of impacts from pollution, invasive species, and induced access. |
| * Impacts on habitats and species from habitat alteration and degradation (e.g., from reduction in downstream water supply, changes in water flow and drainage, soil erosion, pollution of water, soils or air, introduction of invasive species).
 |
| Impacts from Induced Access:* Development of aquaculture projects in previously undeveloped areas can lead to further development, increased disturbance and pressure on natural resources.
 | * Careful site selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists to avoid previously undeveloped areas where possible.
* Restrictions on access to all temporary access roads, and their removal after construction.
* Access controls on permanent access roads.
 |
| Direct Impacts on Flora and Fauna:* Earthworks and clearance may lead to loss of plant species and habitats of conservation interest.
* Development could displace animals and disturb their habitats, by direct disturbance during construction and operation (e.g., from noise, light disturbance at night, general human presence).
* Degradation of native populations due to spread of diseases from cultured species.
 | * Careful site selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists.
* Careful planning of phasing and timing of construction activities.
* Demarcation and avoidance of areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) where possible, and wildlife rescue and translocation where appropriate, under expert supervision.
* Monitoring of diseases in cultured stock and appropriate actions to eliminate these diseases.

Also see measures under soils, run-off and flooding, pollution of soils and water, noise/vibration and induced access above, and invasive species below. |
| Invasive Species* Movement of plant and workforce into areas could introduce invasive species which adversely impact fauna, flora, ecosystems, and crops.
* Accidental release of cultured species (especially non-native ones) may result in establishment of populations or genetic mixing with wild populations, leading to negative impacts on local flora and fauna.
 | * Invasive Species Management Plan, developed and implemented in consultation with authorities, including appropriate eradication measures for different species/groups of species.
* Staff training and awareness raising in communities on potential impacts of invasive species.
* Encourage use of indigenous species in aquaculture systems.
* No introduction of exotic species (e.g., for culture) without comprehensive study and government approval.
* Where exotic species are cultured, monitor status of native species in surrounding area.
* Where possible, clearance of invasive species during routine maintenance of water storage and distribution systems.
 |
| Physical and Economic Displacement of People, Property, Assets and Resources:* Development of aquaculture projects may physically displace people, or lead to loss of assets (e.g., fishing grounds, or land) or loss of income from other water based economic activities (e.g., navigation, tourism).
* Changes in water flow reduction downstream of the aquaculture development (or down-current for coastal aquaculture), causing adverse effects on water availability or quality for other users.
 | While this project does not foresee large displacement, there may be cases where there may be temporary disturbances or lack of access due to civil works. * Careful site selection and siting of all project components, avoid occupation of areas which are inhabited or regarded as of high value by communities where possible.
* Put in place employment plan, giving preference to employment within local communities.
* Early development and sensitive implementation of resettlement planning, in accordance with national regulations and international good practice to compensate for any losses (both physical and economic).
* Develop compensation measures for affected parties, e.g., downstream water users, fishermen, coastal tourism.
 |
| Economic Development and Employment:* Direct employment of local population in workforce, and stimulation of local economy through export of and demand for goods and services to enhance livelihoods and economic activity in local communities; potential for adverse effects if expectations not met and community relations are not well managed.
 | * Development of an Employment Plan, with clear employment requirements and procedures for the construction and operational/ maintenance workforce; fair and transparent hiring and staff management procedures.
* Transparent and culturally appropriate communication with communities regarding employment opportunities.
* Employment requirements and vocational training plan to be agreed with local institutions, so that local people can be trained to meet the project’s needs in a timely fashion.
* Development of measures to manage post-construction transition (e.g., SME development, ongoing opportunities for the workforce in aquaculture, reskilling and alternative employment).
 |
| * Procurement of local goods and services for development of aquaculture system and workforce could deplete resources available for local communities.
 | * Procedures for sustainable local procurement, in consultation with local authorities and community leaders.
* Local capacity building to foster community resilience.
* Monitoring of local prices; exploration of corrective measures (e.g., alternative sourcing) if appropriate.
 |
| Cultural Heritage:* Displacement or damage to cultural heritage sites by construction activities, harm to local setting, amenity value, etc. due to construction
* Change to intangible cultural heritage due to increased access, and interaction with workforce.
 | * Careful site selection and siting of all project components, taking account of community consultation/specialist surveys.
* Development of a Cultural Heritage Management Plan covering tangible and intangible (e.g., local traditions and practices) cultural heritage.
* Implementation of a “Chance Finds” procedure during construction.
 |
| Community Health, Safety and Security:* Poor construction management practices may lead to adverse effects on safety, human health and wellbeing.
 | * Good construction site “housekeeping” and management procedures (including site access)
* Risk assessments and emergency response planning to consider impacts on local communities
* See also control of pollution under Physical Impacts heading.
 |
| * Interaction between workforce and local communities may increase occurrence of communicable diseases, including HIV/AIDS and sexually transmitted diseases (STDs).
 | * Implementation of a health management system for the construction workforce, to ensure it is fit for work and that it will not introduce disease into local communities.
* Training and awareness raising for workforce and their dependents on HIV/AIDS and other STDs, and communicable diseases including malaria; health awareness raising campaigns for communities on similar topics.
 |
| * Changes in exposure to water borne and water related diseases, especially those associated with water dwelling disease vectors (new areas of standing water created) or poor sanitary conditions.
 | * Provide information, education and communication about safe uses of water and occupational safety.
* Facilitate programs/measures to ensure appropriate sanitary and medical facilities are available.
* Implement environmental management measures for vector control: e.g., monitoring for key vectors; contact avoidance via site selection; focal insecticide and molluscicide application; other vector control measures (e.g., changes in water levels and flow rates).
 |
| Workforce-Community Interactions:* Real or perceived disruption to normal community life, through the physical presence of a workforce.
 | * Adoption of a Stakeholder Engagement Plan, as a framework for early and ongoing community consultation.
* Implementation of a Grievance Procedure (see Grievance Procedure and Redress Mechanisms guidance note).
* Works procedures, defining a Code of Appropriate Conduct for all workers, including acceptable behaviour with respect to community interactions.
 |
| In-migration:* Individuals are likely to migrate into the area which may cause conflict with resident communities, and put pressure on resources and infrastructure.
 | * Careful site selection and siting of all project components, after consultation with communities and local authorities.
* Preparation and implementation of an Influx/In-migration
* Management Plan, in consultation with local authorities.

See also Economic Development and Employment, and Induced Access above |
| Labour and Working Conditions:* Poor management of occupational health and safety leading to accidents, injuries and illnesses among workers (e.g., risks of working close to water); mental health issues due to remote or enclosed living.
* Differences in nationality, ethnicity, religion, etc. may lead to discrimination and harassment, and differences (perceived or real) in working conditions between workers may lead to resentment.
 | * Employment practices and working conditions should conform to International Labour Organization (ILO) Standards and national regulations.
* Rest and recreational facilities and time should be provided, and rules on alcohol and drugs defined and clearly communicated to workers.
* The basis for differences in the standard of accommodation should be non-discriminatory; it should be documented and communicated transparently to the workforce.
* Clear and comprehensive health and safety reporting and grievance procedure system should be established, and be freely available to all of the workforce.

See also Employment and Economic Development and Human Rights |

1. **GENERIC POTENTIAL ADVERSE IMPACTS AND RISKS OF FISHERIES AND FISHERIES-ASSOCIATED PROCESSING FACILITIES AND SERVICES SUB-PROJECTS**

| **IMPACTS AND RISKS** | **MITIGATION MEASURES** |
| --- | --- |
| Geology/Hydrogeology:* Interruption or disruption of surface and groundwater flows from small-scale ground clearance and construction of landing, storage or processing facilities.
 | * Design to take account of local hydrological conditions (e.g., taking extra care near permanent watercourses, do not hamper drainage of surface water, avoid works in areas prone to flooding especially during rainy season).
 |
| * Disruption of coastal processes (e.g., wave, tidal and current regime, sediment transport, flood and storm protection) from construction of landing and boat mooring facilities.
 | * Siting and design to take account of shoreline configuration, near- shore currents, groundwater flows, and existing habitats.
* Design and construction of compensatory shore protection and other measures to maintain coastal processes.
* Monitoring of groundwater salinity; where necessary further mitigation may include control/diversion structures for saltwater, installation of cut off wells, sourcing of alternative water supply.
 |
| Soils, Run-off and Flooding:* Loss, damage or disruption of soil/sediments during small-scale construction works.
 | * Minimization of cleared areas and soil disturbance, with revegetation as soon as feasible (with native species).
* Early installation and regular maintenance of drainage and diversion structures, silt traps, etc.; drainage outlets to discharge into vegetated areas if possible; vegetation along watercourses and drainage lines to be retained if possible.
* Retention of topsoil for restoration (including tilling and revegetation) as soon as practicable.
* Careful consideration of timing of works (overall duration and seasonality).
 |
| * Introduction of sediments to watercourses or interruption of drainage patterns, as a result of ground clearance and earthworks.
 |
| Pollution of Soils and Water:* Pollution of watercourses caused by wastewater from processing facilities, as well as small increases in sewage inputs due to workforce during construction works.
 | * Ensure that waste and drainage water complies with discharge standards and treat accordingly.
* Implementation of standard good wastewater management and disposal procedures.
* Wastewater drainage outlets to discharge into vegetated areas if possible; vegetation along watercourses and drainage lines to be retained if possible.
* Installation of sewage treatment to meet required standards; hygiene training for workforce.
 |
| * Release of hazardous substances associated with construction/maintenance activities or with transport of goods (e.g., accidental spills and leaks), leading to soil, surface or groundwater contamination.
 | * Materials handling and control procedures, use of appropriate storage and containment equipment.
* Control of vehicle movements and prohibition of vehicle washing in watercourses, and similar practices.
* Emergency response plans during construction (contractors and local authorities).
 |
| Air Quality:* Dust and emissions from small-scale construction activities, and from vehicles and motorized vessels, could affect human health, vegetation and wildlife.
 | * Sensitive site selection, and siting of construction works and access roads.
* Use of modern equipment, meeting appropriate emissions standards, and regular preventative maintenance.
* Encourage use of non-motorized vessels where appropriate; equip motorized vessels with well maintained, modern motors.
* Dust control and suppression measures, such as dampening and use of vegetation hedges.
* No use of ozone depleting substances during construction or operation.
* Implement appropriate solid waste disposal measures at processing sites.
 |
| * Odors associated with preparation facilities may cause nuisance to nearby receptors.
 |
| Noise and Vibration:* Noise and vibration from small-scale construction activities, and from vehicles and motorized vessels, may disturb sensitive noise receptors (human and fauna, including fish and marine mammals).
 | * Sensitive route selection for access roads, and siting of construction works and facilities, accompanied where necessary by noise attenuation measures.
* Use of modern, well maintained equipment fitted with abatement devices (e.g., mufflers, noise enclosures).
* Strict control of timing of activities (e.g., prohibition on night working where possible).
* Observance of seasonal sensitivities (e.g., breeding seasons), and alteration of activity to reduce noise levels at that time.
 |
| Resources and Waste:* Excessive or unregulated capture of a small range of target species and accidental capture of other non-targeted species may deplete stocks and place pressure on local food resources.
 | * Institute measures to ensure sustainability of fisheries, through use of quotas, seasonal and ‘sensitive area’ closures, compulsory permitting etc.; encouraging sustainable traditional practices and restricting practices allowing large and non-specific catches (e.g., trawling, use of fish poisons or explosives); education and awareness-raising around overfishing.
* Include consideration of local resource needs within planning of quotas.
 |
| * Inefficient waste management during construction, operation and maintenance leading to excess consumption of materials, generation of wastes/emissions, pollution of soils and water.
 | * Preparation of Waste Management Plan following the waste hierarchy, supported by training and awareness-raising around topic of waste for workforce and for local community.
* Use of authorized contractors for hazardous and any other wastes which the project cannot dispose of safely.
 |
| Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways:* Small-scale construction works causing loss, degradation or fragmentation of protected or ecologically sensitive areas (e.g., wetlands, migration routes), and other areas of conservation interest.
 | * Careful siting of all project components, with advice from biodiversity authorities/wildlife specialists.
* Wherever feasible, establishment of buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive, and avoidance or minimization of activity within these zones.
* Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value, using specialist advice and input so as to maintain the integrity of the habitat, backed up by a long-term monitoring program and corrective actions as necessary.

Where development in sensitive areas cannot be avoided, mitigation may include:* Minimization of area impacted, clear demarcation of remaining intact areas of habitat, and prohibition of activity into those areas for any purpose; prohibit or minimize activities in the vicinity of sensitive areas.
* Habitat rehabilitation and ecosystem restoration of areas no longer required to occur as soon as possible after construction.
* If loss of Critical Habitat is inevitable, development/implementation of an Offsets Programme.
* Education of workforce and local communities as to the potential damage fisheries may cause to ecosystems, and on methods for avoiding damage (e.g., using buoys and designated anchoring locations).

See relevant sections re: control of impacts from pollution, invasive species, and induced access. |
| * Impacts on habitats and species from habitat alteration and degradation during construction and operation (e.g., changes in water flow and drainage, soil erosion, pollution of water, soils or air).
 |
| * Impacts on habitats and species from habitat alteration and degradation caused by fishing activities (e.g., anchor or net damage to subsurface habitats).
 | * Discourage use of destructive fishing practices, such as trawling; provide materials and training in support of sustainable and non- destructive fishing practices.
* Education and awareness-raising around potential impacts of different fishing methods on habitats and the importance of habitat conservation.
 |
| Impacts from Induced Access:* Development of artisanal fisheries projects in remote or undeveloped areas leading to further development, increased disturbance and pressure on natural resources through bush meat hunting, logging, fire, etc.
 | * Careful site selection, with advice from biodiversity authorities/ wildlife specialists to avoid remote and previously inaccessible areas where possible.
* Where possible, instate access controls on roads leading to project facilities (e.g., jetties, processing facilities) in otherwise undeveloped or remote areas.
 |
| Direct Impacts on Flora and Fauna:* Small-scale ground clearance may lead to loss of plant species and habitats of conservation interest.
* Development may displace animals and disturb their habitats (e.g., increased vessel and vehicle presence, construction of landing areas and processing facilities).
 | * Careful site selection and siting of project facilities, with advice from biodiversity authorities/wildlife specialists.
* Careful planning of phasing and timing of construction activities.
* Demarcation and avoidance of areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) where possible, and wildlife rescue and translocation where appropriate, under expert supervision.
* Also see measures under soils, run-off and flooding, pollution of soils and water, noise / vibration and induced access above, and invasive species below.
 |
| * Direct mortality of target and non-target species, leading to depletion of their populations, including involuntary capture in lost nets.
 | * Institute measures to ensure sustainability of fisheries, through use of quotas, seasonal and ‘sensitive area’ closures, compulsory permitting etc.; encouraging sustainable traditional practices and restricting harmful practices (e.g., trawling, use of fish poisons or explosives); education and awareness-raising around overfishing, sensitive species and habitats.
 |
| Invasive Species:* Movement of a workforce into the project area, or introduction of non-native species during rehabilitation, could introduce invasive species which adversely impact fauna, flora, ecosystems, and crops.
 | * Invasive Species Management Plan, which should be developed and implemented in consultation with authorities, including appropriate eradication measures for different species/groups of species.
* Staff training and awareness-raising in communities.
* No introduction of exotic species (e.g., for site rehabilitation) without specialist vetting and government approval.
 |
| Physical and Economic Displacement of People, Property, Assets and Resources:* Construction of associated facilities may physically displace people, or lead to loss of assets (e.g., loss of land of agricultural importance).
* Potential for economic displacement of specific individuals or groups with existing income from fisheries if they are excluded from sub-projects, or of other water based economic activities (e.g., navigation, tourism).
 | * Careful site selection and siting of project facilities, avoiding occupation of areas which are inhabited or regarded as having high value by communities where possible.
* Early development and sensitive implementation of resettlement planning, in accordance with national regulations and international good practice to compensate for any losses (both physical and economic).
* Put in place employment plan, giving preference to employment within local communities.
* Develop detailed baseline of existing reliance on fishery resources in the project area, both within the local community and outside of the community of focus; from this, identify specific groups that may not benefit from the project and adopt corrective measures as required.
* Develop compensation measures for affected parties (e.g., excluded fishermen).
 |
| Economic Development and Employment:* Direct employment of local population in the construction workforce.
* Stimulation of local economy through export of produce to market, and increased demand for goods and services to enhance livelihoods and economic activity in local communities; potential for adverse effects if expectations not met and community relations are not well managed.
 | * For artisanal fisheries projects, a community-based approach is encouraged: the small construction workforce should be sourced in the local or regional area; further skills required for fishing, processing or maintenance activities to be included in local training programs and developed within the community, in order to retain value within that local community.
* Development of an Employment Plan, with clear employment requirements and procedures for the construction workforce.
* Transparent and culturally appropriate communication with communities regarding employment opportunities.
 |
| * Procurement of local goods and services for development of related facilities and equipment, and for the workforce could deplete resources available for local communities.
 | * Procedures for sustainable local procurement, in consultation with local authorities and community leaders.
 |
| Cultural Heritage:* Displacement or disturbance to cultural heritage sites caused by construction or fishing activities, harm to local setting, amenity value, etc. due to construction.
* Change to intangible cultural heritage due to increased access, and interaction with non-local workforce.
 | * Careful site selection and siting of all project facilities, taking account of community consultation/specialist surveys.
* Development of a Cultural Heritage Management Plan covering tangible and intangible (e.g., local traditions and practices) cultural heritage.
* Implementation of a “Chance Finds” procedure during construction.
 |
| Community Health, Safety and Security:* Poor construction management practices may lead to adverse effects on safety, human health and wellbeing.
 | * Good construction site “housekeeping” and management procedures (including site access).
* Risk assessments and emergency response planning to consider impacts on local communities.
* See also control of pollution under Physical Impacts heading.
 |
| * Changes to local food availability, due to export of increased proportion of captured fish, may lead to malnutrition.
 | * Provision of community support and development mechanisms for subsistence fisheries/aquaculture.
 |
| * Interaction between any non-local construction workers and local communities may increase occurrence of communicable diseases, including HIV/AIDS and sexually transmitted diseases (STDs).
 | * Implementation of a health management system for the workforce, to ensure it is fit for work and that it will not introduce disease into local communities.
* Training and awareness raising for workforce and their dependents on HIV/AIDS and other STDs, and communicable diseases including malaria; health awareness raising campaigns for communities on similar topics.
 |
| Workforce-Community Interactions:* Real or perceived disruption to normal community life, through the physical presence of a non-local workforce.
 | * Adoption of a Stakeholder Engagement Plan, as a framework for early and ongoing community consultation
* Implementation of a Grievance Procedure (see Grievance Procedure and Redress Mechanisms guidance note).
* Works procedures, defining a Code of Appropriate Conduct for all workers, including acceptable behaviour with respect to community interactions.
 |
| Labour and Working Conditions:* Poor management of occupational health and safety leading to accidents, injuries and illnesses among workers.
* Differences (perceived or real) in working conditions between workers may lead to resentment.
 | * Construction employment practices, working conditions and workforce living conditions should conform to International Labour Organization (ILO) Standards and national regulations.
* Clear and comprehensive health and safety reporting and a grievance procedure system should be established, and be freely available to all of the workforce.

See also Employment and Economic Development. |

Source: AfDB, 2015, pp. 125-127

1. BLUE BOND FUNDED ACTIVITIES GUIDELINES FOR CONSTRUCTION HEALTH AND SAFETY

**Technical Specifications for Construction**

**EP1.3 GENERAL CONSTRUCTION REQUIREMENTS**

The following general requirements shall apply:

EP1.3.1 When night work is authorized by the Engineer or his Representative, the Contractor shall provide adequate lighting where work is being executed at night and shall provide and install any additional lighting that the Engineer may require in order to gain access to watch and supervise the Works and carry out any testing and examination of materials.

EP1.3.2 The Contractor shall minimize the pollution of and disturbance to lands, roads and other places on and around the Site. No trees or other vegetation shall be removed except to the extent necessary for the Works. Vegetation removal shall be limited to within 3 m from edge of shoulder.

EP1.3.3 The Contractor shall ensure that access is provided to all properties adjacent to the Site for the duration of the Contract.

EP1.3.4 The Contractor shall take all reasonable precautions:

* In connection with any rivers, streams, waterways, and drains, to prevent silting, flooding, erosion and pollution of the water so as to adversely affect the quality or appearance or cause injury or death to human, animal, fish or plant life.
* In connection with underground water resources (including percolating water) to prevent any interference with the supply to or abstraction from such sources and to prevent pollution, so as to adversely affect the quality or quantity of groundwater.

EP1.3.5 The Contractor shall provide, maintain and remove on completion of construction, facilities to minimize pollution due to the Contractor’s operations including, but not limited to, aggregate washing, concrete mixing, grouting, etc.

EP1.3.6 The Contractor shall provide, maintain and remove on completion of construction, adequate fencing or barriers around active zones of construction and all equipment/material staging areas, but without prejudice to his obligations including maintenance of free access for the Employer, the Engineer, other contractors and any other persons entitled to such access.

EP1.3.7 The Contractor shall be responsible for acquainting himself with and observing all current, applicable laws and regulations.

EP1.3.8 The Contractor shall acquaint himself with the position of all existing services such as sewers, surface water drains, cables for electricity, internet and telephone, telephone and lighting poles, water mains, and the like before commencing any excavation or other work likely to affect the existing services.

EP1.3.9 The Contractor shall be held responsible for damage to existing works or services, and shall indemnify the Employer and the Engineer against any claims in this respect (including consequential damages). The Contractor shall be responsible for the reinstatement of the services so affected.

EP1.3.10 In all cases where such works or services are exposed, they shall be properly shored, hung up or otherwise protected. Special care must be exercised in filling and compacting the ground under mains, cables, etc., so to leave uncovered exposed water meters, stopcock boxes and similar items.

EP1.3.11 Notwithstanding the foregoing requirements and without reducing the Contractor’s responsibility, the Contractor shall inform the Engineer immediately if any existing works or services are exposed, located or damaged.

EP1.3.12 All costs that may be incurred by the Contractor as a result of programming and coordinating work to enable any alterations to the services to be carried out and the cost of any safety precautions that shall be deemed necessary due to the proximity of the Works to the power lines shall be at the Contractor’s expense.

EP1.3.13 If instructed, upon completion of the contract and, after receiving approval in writing from the Engineer, the Contractor shall take down and remove all structures forming part of his construction sites and/or equipment/materials staging areas and shall arrange for the disconnection of the water supply, remove all drains and culverts, backfill trenches, fill in all latrine pits, soakaways and other sewage disposal excavations, with the exception of items and services that are required to revert to the ownership of the Employer and shall restore the Site and all staging areas, as far as practicable, to its original condition and leave it in a neat and tidy condition. Develop strategy for waste reuse, recycling and disposal.

**EP2 SPECIFICATIONS FOR MATERIALS MANAGEMENT**

**EP2.1 SCOPE**

This specification covers requirements for the handling, use and storage of fuels, lubricants and chemicals. Fuels and lubricants have properties than can result in adverse environmental impacts if they are accidentally spilled or improperly handled. The strategies to minimize occurrences of accidentally spillage of these substances are detailed in this section.

**EP2.2 APPLICATION**

These specifications apply to all Personnel and Contractors involved in the transportation, handling, use and storage of fuels and lubricants and chemicals during construction of the project. It also applies to all personnel who are involved in the transportation, handling, use and clean-up of potentially hazardous industrial compounds and reagents. In addition, these specifications also apply to all personnel who are involved in the transportation, handling, use and clean-up of potentially hazardous industrial compounds and reagents.

**EP2.4 MANAGEMENT OF CHEMICALS**

Chemicals, reagents and industrial compounds that may be used during construction, include: liquid asphalt, including tar and bitumen, cement, solvent cleaning compounds, and calcium for dust control. These materials have properties that may result in adverse environmental impacts if they are spilled, improperly disposed of, or otherwise mishandled.

The following strategies shall be implemented to minimize the potential for accidental release of industrial compounds and reagents into the environment:

EP2.4.1 All personnel handling industrial compounds and reagents shall be properly trained.

EP2.4.2 All industrial compound and reagent storage facilities shall be inventoried and inspected by the Contractor on a weekly basis for spillage and loss.

EP2.4.3 Current and up-to-date Material Safety Data Sheets (from suppliers) for all chemicals used on site shall be located on site at various locations including staging areas.

EP2.4.4 All chemicals used during the construction phase shall be stored in approved containers in designated storage areas.

EP2.4.5 Adequate quantities and appropriate types of spill clean-up materials and equipment shall be kept on site and at each staging area at all times.

EP2.4.6 Spill clean-up kits and supplies (e.g., absorbent materials) shall be inspected by the Engineer Environmental Inspector on a periodic basis to ensure materials are present in sufficient quantities to deal with potential incidents involving the products described herein.

EP2.4.7 Personnel associated with the transportation, storage and use of the chemicals must be trained to respond to incidents involving these products.

EP2.4.8 Mock spill clean-up exercises shall be conducted at the initiation of construction and every 6 months thereafter for the duration of construction.

EP2.4.9 In the event of a spill, the specified spill contingency plan shall be implemented (refer to the Environmental Management Plan and EP5).

EP2.4.10 All spills shall be reported to the appropriate regulatory authorities as specified by the spill contingency plan.

EP2.4.11 All spills shall be properly contained and cleaned up in accordance with requirements of the specified spills contingency plan. Remediation strategies shall be reviewed with the regulatory authorities as specified.

EP2.4.12 The Engineer Environmental Inspector shall conduct regular inspections and inventories of all industrial compound and reagent storage facilities and observe industrial compound and reagent handling practices on a periodic basis. Operating procedures shall be adjusted to improve practices when improvements are required.

**EP3 SPECIFICATIONS FOR WASTE MANAGEMENT**

**WASTE MANAGEMENT GENERAL**

The following specification applies to all waste materials including scrap metal, abandoned vehicles and vehicle parts:

EP3.3.1 All excess materials shall be managed so as to prevent their entry to water bodies and watercourses.

EP3.3.2 All stockpiles will be placed so as not to interfere with watercourses or surface drainage and shall not be placed within 10 m of a watercourse or drain.

EP3.3.3 All waste stockpiles shall be removed within one month of initial placement.

EP3.3.4 The Contractor shall develop a strategy for the reuse, recycling and/or disposal of all waste materials including waste hydrocarbon materials and scrap metal of all kinds at the outset of construction. The strategy shall identify the types of materials that can be reused or recycled and shall specify the manner in which these materials will be removed from the site. The strategy shall also specify those materials that are to be disposed of and shall identify specific approved facilities where these materials shall be sent, and the manner in which all such waste materials will be removed from the site.

**EP3.8 SOLID DOMESTIC WASTES**

The effective management and disposal of solid, non-hazardous domestic wastes, including waste food, packaging, office wastes, paper, etc., is essential to reduce the volumes of materials to be landfilled / incinerated. This section identifies strategies for the management and disposal of solid domestic wastes. The domestic waste management strategies apply to all personnel and visitors who are involved in the generation, storage, handling, transportation or disposal of domestic waste materials.

EP3.8.1 Solid waste reuse, recycling, sorting and disposal procedures shall apply to all personnel and shall be undertaken consistent with the waste management strategy to be developed by the contractor as required by EP3.3.

EP3.8.2 The Contractor shall provide sufficient numbers of waste collection receptacles to prevent littering of construction sites and staging areas.

EP3.8.3 All combustible, non-hazardous wastes including food wastes, packaging and paper products can be incinerated at a location approved by the Employer and the Engineer.

EP3.8.4 Measures shall be taken to ensure that hazardous wastes are segregated from, and not incinerated with, the more routine domestic wastes, and handled according to applicable procedures.

EP3.8.5 Ash residue from the incinerator shall be removed from the site for disposal at a designated landfill;

EP3.8.6 Non-combustible domestic waste shall be properly stored in designated containers and should be periodically removed for disposal at a designated landfill site.

EP3.8.7 The Engineer Environmental Inspector shall monitor domestic waste handling practices on a regular basis. Operating procedures should be adjusted to further improve waste minimization and waste handling practices as appropriate.

**EP6 SPECIFICATIONS FOR SPILLS MANAGEMENT**

**EP6.1 SCOPE**

These specifications provide procedures for management of spills that may occur during construction activities.

**EP6.2 APPLICATION**

These specifications apply to all Personnel and Contractors involved in the transportation, handling and use of materials that represent a concern if a spill occurs. Specific Spill Management Plans are provided for:

Diesel Fuel (EP6.3) and Gasoline (EP6.4). Each Spill Management Plan consists of Dangers, Initial Spill Response, Containment, Fire Response, Recovery and Disposal. Reporting requirements are also provided.

These specifications shall be incorporated by the Contractor into an Emergency Response Plan to be submitted to the Engineer prior to construction.

**EP6.3 ACTION PLAN FOR SPILLS**

EP6.3.1 **Dangers**. Materials exhibiting one or more of the following characteristics are considered to represent a high level of concern or dangers:

* Flammable.
* Slightly toxic by ingestion, highly toxic if aspirated.
* Moderately toxic to fish and other aquatic organisms.
* Harmful to waterfowl.
* Float on Water

EP6.3.2 **Initial Spill Response.** The Contractor shall respond as follows:

* Upon detection of a spill that cannot immediately and safely be contained and removed, notify the police, the Fire Service, the Engineer and the Employer;
* The source of the spill and the direction of flow shall be identified;
* The type of material spilled shall be identified and actions specified to be safe for handling the material shall be taken in an effort to stop the spill at source; if the material cannot be identified, the material should be assumed to be dangerous and direct contact should not be made without prior consultation with appropriate authorities;
* Contain the spill with dyking, barricading or blocking flow by any means available, including the use of available earthmoving equipment.
* Use all available means to prevent the spill from reaching open water.
* Ensure that unauthorized persons do not contact the spilled material;
* Ensure that all sources of open flame and personal smoking materials are extinguished within a minimum of 100 feet of the spill;
* Ensure the health and safety of all personnel and animals in the immediate area; personnel not involved in containment or clean-up activities should be kept away from the area and the area should be kept clear of animals;
* Provide all materials and undertake any actions necessary to ensure that employees, residents, the traveling public, non-essential employees and animals are kept at a safe distance from the affected area, and are provided safe access away from/around the affected area until the area is declared safe by the appropriate authorities.

EP6.3.3 **Containment**. The Contractor shall consult with the Engineer to determine the most appropriate method of containment, recovery and/or disposal. The following general procedures should be applied to contain the spill:

***When the spill is on land:***

* Excavate a trench or construct a berm downhill of the spill;
* Line trench or berm with pvc/plastic if possible; alternately use absorbent pads;
* Once contained the spill can be pumped to drums or to a storage tank;
* Monitor for seepage and for spent absorbent;
* Where absorbents are used, apply fresh absorbent from the downhill portion of the spill and progress up to the source;
* Place spent absorbent material in drums and seal until suitable disposal arrangements can be made;
* Avoid continued work in the area until the site has been cleaned up;
* Collect samples for material characterization and identification of an appropriate disposal method (in consultation with the Engineer);
* Stockpile excavated soil (for a period not to exceed 30 days unless directed otherwise by regulatory authorities) and cover with a tarpaulin until a suitable disposal method has been prescribed.

***When the spills in water:***

* Immediately seal off the source of the leak with a berm or ditch, preferably lined with pvc/plastic, to minimize the volume of material that will enter the watercourse;
* If available, an absorbent boom should be placed downstream of the spill entry point;
* Once contained the spill can be pumped to drums or to a storage tank;
* In still or slow moving water, absorbent pads can possibly be used, when available;
* Avoid continued work in the area until the site has been cleaned up;
* Collect samples for material characterization and identification of an appropriate disposal method (in consultation with the Engineer,).

EP6.3.4 **Fire Response** includes the following measures:

* Notify Engineer
* Notify emergency response authorities (e.g., fire, police)
* Use C02, dry chemical, foam, or water spray (fog).
* Use fog streams to protect rescue team and trapped people.
* Use water to cool surface of tanks
* Divert the fuel to an open area and let it burn off under control.
* If the fire is put out before all fuel is consumed, beware of re-ignition.
* Contact with strong oxidizing agents (e.g., ammonium nitrate) may ignite the product, or cause it to explode.

EP6.3.5 **Recovery** shall include the following measures:

* Unburned fuel can be soaked up by sand, straw, peat moss, or by commercial absorbents (e.g., Graboil).
* Once contained, if quantities permit, pump to drums or tank;
* If necessary, contaminated soil shall be excavated.
* Fuel entering the ground can be recovered by digging sumps or trenches and pumping from below the water table.
* Diesel fuel on a water surface shall be collected and recovered by booms, absorbents such as Graboil, or collected by a liquid/solid vacuum cleaner.

EP6.3.6 **Disposal**:

* Incineration may be utilized under controlled conditions (obtain permission from the Engineer)
* Storage tanks and drums containing spilled material shall be stored by the Contractor in a safe and secure/restricted area;
* The Contractor is responsible for making all necessary arrangements and disposing of all stored materials with approval of the appropriate authorities.

EP6.4.4 **Fire Response** includes the following measures:

* Notify the Engineer
* Notify emergency response authorities (e.g., fire, police)
* For fires involving large quantities of ammonium nitrate, evacuate and do not attempt to fight fire.
* For fire involving small quantities of ammonium nitrate, use large amounts of water to cool (C02, etc., not effective as NH4N03 contains oxygen in formula).
* Presence of organic impurities can lower the temperature at which detonation occurs.
* Use C02, dry chemical, foam, or water spray (fog).
* Use fog streams to protect rescue team and trapped people.
* Use water to cool surface of tanks.
* Divert the diesel duel to an open area and let it burn off under control.
* If the fire is put out before all diesel is consumed, beware of re-ignition.

EP6.4.5 **Recovery** shall include the following measures:

* Unburned gasoline can be soaked up by sand, straw, peat moss, or by commercial absorbents (e.g., Graboil).
* Once contained, if quantities permit, pump to drums or tank;
* If necessary, contaminated soil shall be excavated.
* Fuel entering the ground can be recovered by digging sumps or trenches and pumping from below the water table.
* Fuel on a water surface shall be collected and recovered by booms, absorbents such as Graboil, or collected by a liquid/solid vacuum cleaner.

EP6.4.6 **Disposal** may include:

* Storage tanks and drums containing spilled material shall be stored by the Contractor in a safe and secure/restricted area;
* The Contractor is responsible for making all necessary arrangements and disposing of all stored materials with approval of the appropriate authorities.
* Evaporation or incineration may be utilized under controlled circumstances (obtain permission from the Engineer), if aspirated.

**EP6.5 REPORTING**

The Contractor shall prepare a written report within 48 hours of a spill detailing the events leading up to the spill, as well as all actions taken to advise proper authorities, repair any damage, and recommend changes to construction procedures to avoid a similar problem at another location. The report will be submitted to the Engineer. At minimum, the report shall provide the following details:

* date and time of the spill;
* location of the spill and all affected areas;
* material spilled and estimated quantity;
* cause of the spill;
* actions taken to terminate and contain the spill;
* site clean-up measures taken;
* persons notified; and
* follow-up actions to be taken (e.g. samples sent for analysis, method of disposal, contractor hired, monitoring required, etc.).

**EP6.7 TRAINING AND SPILL EXERCISE**

EP6.7.1 All members of the Spill Response Team shall be trained and familiar with the spill response resources, including their location and access, the Spill Contingency Plan, the Emergency Response Plan and appropriate spill response methodologies.

EP6.7.2 All personnel at the site shall be familiar with spill reporting requirements.

EP6.7.3 Fuel handling crews shall be fully trained in the safe operation of these facilities, spill prevention techniques and initial spill response, and similarly the staff involved in process and wastewater systems shall be trained in their safe operation of these systems.

EP6.7.4 The Contractor shall conduct a mock spill exercise at the beginning of construction and once every 6 months for the duration of Construction, to test the response of the Spill Response Team to fuel and other spills.

EP6.7.5 A report shall be made by the Engineer Environmental Inspector noting the response time, personnel, and any problems or deficiencies encountered. This report shall be used to evaluate the ability to respond to spills and determine areas necessary for improvement.

**EP10 VEHICULAR, NON-VEHICULAR AND PEDESTRIAN TRAFFIC MANAGEMENT AND SAFETY**

**EP10.1 SCOPE**

The strategies to minimize the potential for large scale traffic slowdown and any adverse effects on the environment, while maintaining safety for all during the construction phase are detailed in this specification.

**EP10.2 MANDATE**

This section applies to all individuals who are responsible for the transport of equipment, materials, supplies or personnel to and from the Project site during construction. Project personnel responsible for scheduling of construction activities also form part of this management process.

**EP10.3 TRAFFIC MANAGEMENT AND SAFETY**

To prevent unacceptable levels of traffic slowdown and to reduce the potential effects on various components of the environment due to the construction activity, it is recommended that the following should be accomplished.

EP10.3.1 Construction shall be scheduled in phases.

EP10.3.2 Construction shall be carried out in such a manner to avoid unnecessary traffic bottlenecks.

EP10.3.3 The Contractor shall be required to construct and maintain temporary detour roads adjacent to construction. Where the new construction is exactly on the existing alignment and diversions or deviations are not possible, the Contractor will arrange the construction so as to maintain a single lane of controlled traffic as necessary on any particular portion of the Works.

EP10.3.4 Manually operated “stop/go” signals, if used, shall be of the size and type approved by the Engineer and radio equipped flagmen should be used at all detours. The cost of this traffic control for the period agreed by the Engineer is the responsibility of the Contractor.

EP10.3.5 All schemes for the temporary control of traffic must be submitted to the Engineer for approval beforehand. Depending on legal, environmental or any other considerations, the Engineer may refuse approval to certain schemes involving diversions or deviations on or off the Site of the road Works and the requirements for such measures must be decided as soon as possible after construction commences.

EP10.3.6 When required, the Contractor shall erect and maintain, all signs necessary for the proper direction and control of traffic. All such signs shall conform to international standards and shall be approved by the engineer before erection.

EP10.3.7 Road blocks/detours shall be installed and signed appropriately, where required, to direct traffic.

EP10.3.8 Safe access for non-motorized vehicles shall be provided through construction areas.

EP10.3.9 Safe access for pedestrian and non-vehicular traffic shall be provided through construction areas.

EP10.3.10 Pedestrian traffic shall be restricted to one side of the road (non-active work area) for safety.

EP10.3.11 Drivers assisting the construction process must hold a valid driver’s license, appropriate to the vehicle in question, and have a good driving record.

EP10.3.12 Drivers assisting the construction process shall adhere to the speed limits posted along the length of the roads.

EP10.3.13 Speed limits shall be reduced temporarily and marked accordingly, where required, to provide for the safety of the drivers, pedestrians and workers.

EP10.3.14 Signs and road markers shall be installed to instruct and inform all drivers of local restrictions in a timely and safe manner.

EP10.3.15 The Contractor shall furnish barricades or temporary fencing that may be required for the safety of the public or the security of the Works as required by the Engineer, and erect such barricades or temporary fencing at locations specified by the Engineer.

EP10.3.16 Gross vehicle weights for construction vehicles shall be limited according to road and bridge capacities.

EP10.3.17 Drivers assisting the construction process shall be instructed to be careful at all times, particularly when carrying material whose spillage may be detrimental to the environment.

EP10.3.18 Such drivers shall also communicate the presence of traffic bottlenecks and the resulting time loss to the site engineer; data generated from these reports can be used for traffic management plan revisions where appropriate.

EP10.3.19 The Spill Contingency Plan shall be implemented, as required (Specification EP6).

EP10.3.20 Drivers assisting the construction process shall be trained to perform spill reporting and clean-up procedures for minor spills.

EP10.3.21 Drivers assisting the construction process that demonstrate a lack of safety while driving shall be subject to warning(s) or, as required, additional measures to ensure the continued safety of pedestrians, drivers and workers.

EP10.3.22 The Engineer Environmental Inspector and the Contractor shall be in regular communication and shall monitor the effects of construction on traffic pedestrians, and residents during the construction phase of the project. Operating procedures shall be adjusted to address any unexpected adverse effects.

EP10.3.24 The Contractor shall consult with police force in the area regarding their requirements in the control of traffic and other matters, and provide all assistance and facilities that may be required by such officials, in the execution of their duties.

**EP11 SPECIFICATIONS FOR HEALTH, SAFETY AND ACCIDENTS ON THE CONSTRUCTION SITE**

**EP11.1 SCOPE**

These specifications cover the guidelines for health, safety and accidents in construction sites.

**EP11.2 APPLICATION**

These specifications apply to all Personnel and Contractors involved in construction of the project. The Contractor shall ensure, so far as is reasonably practicable and to the satisfactions of the Engineer, and the Employer, the health, safety and welfare at work of his employees including those of this subcontractors and of all other persons on the site.

**EP11.3 HEALTH, SAFETY AND ACCIDENT PROCEDURES**

In the execution of his contractual responsibilities, the contractor shall:

EP11.3.1 Ensure the provision and maintenance of Construction sites that are lighted, safe and without risks to health.

EP11.3.2 Ensure the execution of suitable arrangements for ensuring safety and absence of risks to health in connection with the use, handling, storage, transport and disposal of articles and substances.

EP11.3.3 Ensure the provision of protective clothing and equipment (including hard hats and hearing protection for applicable activities), first aid stations with such personnel and equipment as are necessary and such information, instruction training and supervision as are necessary to ensure the health and safety at work of all persons employed on the Works in accordance with all applicable laws.

EP11.3.4 Designate as Safety Officer of one of the Contractor’s senior staff who shall have specific knowledge of safety regulations and experience of safety precautions on similar works and who shall advise on all matters affecting the safety of workmen and on measures to be taken to promote safety.

EP11.3.5 Ensure the provision and maintenance of access to all places on the Site in a condition that is safe and without risk of injury.

EP11.3.6 Provide clean, sufficient and continuous supply of fresh water, both for construction of the Works and for all related facilities at staging areas. He shall undertake all arrangements including pipelines and meters as necessary for connecting to local water mains and the provision of pumps, storage tanks or water conveyance where necessary, payment of all fees and water charges and the satisfactory removal of all such arrangements and provisions on completion of the Works. The water shall be cleared of suspended solids and free from any matter in quantities considered by the Engineer to be deleterious to the work or human health. Water supplied to all the offices, laboratories and houses shall be wholesome and potable.

EP11.3.7 Provide and maintain adequate sanitation, refuse collection and disposal, complying with all applicable laws and by-laws and to the satisfaction of the Engineer, for all sites and related facilities at staging areas.

EP11.3.8 Provide an adequate number of suitable latrines and other sanitary arrangements at sites and areas where work is in progress.

EP11.3.9 Notify the Engineer and emergency response authorities (e.g., fire and police) of all personal injury accidents that could result in lost work hours, and shall submit a report of the details to the Engineer and the Employer as soon as possible after its occurrence.

**EP14 SPECIFICATIONS FOR PROTECTION OF HISTORIC AND CULTURAL RESOURCES**

To avoid potential adverse impacts to historic and cultural resources, if any, the Contractor shall:

* Protect sites of known antiquities, historic and cultural resources by the placement of suitable fencing and barriers;
* The Contractor will consult with local authorities and appropriate agencies prior to construction works to identify potential historic and cultural sites that may be affected by Project works.
* Not locate construction camps within 500 meters from cultural resources.
* Adhere to accepted international practice and all applicable historic and cultural preservation requirements of the Government of Seychelles, including all appropriate local government entities
* In the event of discoveries of cultural or historic artefacts (movable or immovable) in the course of the work, the Contractor shall take all necessary measures to protect the findings and shall notify the Engineer and concerned District-level and central government level representatives. If continuation of the work would endanger the finding, project work shall be suspended until a solution for preservation of the artefacts is agreed upon.

**EP15 SPECIFICATIONS FOR PROTECTION OF BORROW AREAS AND QUARRIES**

* The contractor shall ascertain that the owner of the quarry, from which construction materials shall be extracted, has been granted the necessary permit or license of exploitation by the corresponding authority, municipal, departmental or national (cite the law or regulation as the case may be).
* The following mitigation measures shall be generally used to control erosion and other direct impacts at borrow sites and quarries:
	+ the topsoil organic layer, removed to uncover the quarry or borrow-pit, shall be piled up in storage at an approved and convenient location, so that when the exploitation is finished, the organic topsoil shall be reincorporated to its original location; in addition, cover gently sloping or flat borrow sites with topsoil after termination of the use of the site;
	+ shape contour embankments to slow down run-off;
	+ landscape the faces of vertical rocky borrow sites in the process of exploitation; and
	+ provide for conditions for good borrow site management practices in contracts with private site operators.
* The contractor shall prevent fill material from escaping beyond the embankment slope stakes by the construction of toe ditches or by the erection of rock, boulder, earth or log barriers at the toes of embankments or by other suitable means satisfactory to the engineer.
1. BLUE BOND FUNDED ACTIVITIES SAFEGUARDS TEMPLATES
2. ELIGIBILITY FORM

SUB-PROJECT SUMMARY

Proponent: ………………………………………………………………………………………

Sub-Project Name: ……………………………………………………………………………

Sub-Project Location: ……………………………………………………………………………….

Estimated Sub-Project Cost: ………………………………………………………………………...

Sub-Project Objectives: ……………………………………………………………………………..

Brief Description of Proposed Sub-Project: ……………………………………………………….

**Eligibility check:**

|  |  |  |
| --- | --- | --- |
|  | **Yes** | **No** |
| Does the subproject fall under the indicative list of eligible activities to be funded under the BIF? |  |  |

**Eligibility check against the exclusion list**

 Any sub-project meeting any of the below listed criteria will be ineligible for funding under the SWIOFish3 Project.

|  |  |  |
| --- | --- | --- |
| **Sub-projects in Exclusion List** | **Yes**  | **No** |
| Sub-projects located within or adjacent to a protected or an ecologically sensitive area, as defined in Schedule 2 of the Environment Protection (Impact Assessment) Regulations  |  |  |
| Sub-projects that involve the significant conversion or degradation of critical natural habitats such as sensitive ecosystems. converting mangrove forests to aquaculture use or other land uses, or other unsustainable cutting of mangrove forests |  |  |
| The introduction of any new exotic marine species (note: this provision does not apply to any native and/or naturalized species, or any micro-algae that is imported as live feed) |  |  |
| Activities that could dangerously lead to the exposure of sensitive/critical/vulnerable habitats unsustainable or illegal fishing activities (e.g., illegally-sized nets, spear fishing, use of dynamite, etc.)  |  |  |
| Construction of permanent buildings within the wetlands |  |  |
| Construction of walls in or around wetlands which will interrupt water flow |  |  |
| The tidying of wetlands or mangroves by the removal of dead wood that serves as habitat for multiple fish species |  |  |
| Extraction of raw material from protected areas |  |  |
| Filling of wetlands within protected areas and outside in strategic landscapes. |  |  |
| Sub-projects which cause significant socioeconomic impacts involving permanent involuntary resettlement resulting in relocation of people or displacement of houses or building structures; or loss, denial or restriction of access to land, crops and other economic assets; or significant loss of sources of income or means of subsistence) |  |  |
| Sub-project which physically block or restrict fishers’ access to the water (e.g., structures with walls or other shoreline obstructions or barriers that physically prevent fishers from accessing or launching their boats using customary or longstanding paths, roads or other rights of way) |  |  |

**Form prepared by**:

Signature: Date: \_\_\_\_\_\_\_\_\_\_\_\_

Name (print): Job Title:

**Form approved by**:

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name (print): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Job Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. SCREENING FORM

**Instructions**

The Environmental and Social Specialist at the PIU will complete this form for all subprojects proposals. In completing this form, the PIU Environmental and Social Specialist or Consultant may need to consult secondary information sources, other specialists at the MFTIEP or at the other co-implementing ministries (i.e., MFAg and MEECC), and/or the subproject proponent and undertake site visits if the environmental and social information available is insufficient or if the subproject is likely to cause significant negative risks.

The PIU Project Manager will give final approval to the completed form.

The proposed category for each sub-project, as well as the terms of reference (TOR) for the necessary environmental and social analyses, will be subject to consultation with the Environmental Assessment and Permit Section (EAPS) of the MEECC. In the particular case of TORs for ESIAs, the MEECC through the EAPS must give its formal approval as national environmental authority.

Screening date:

**Subproject Location**

Country:

Island:

District:

**Project Leaders**

Ministry: Ministry of Finance, Trade, Investment and Economic Planning

 The Blue Economy Department, Vice President’s Office

**Part A: Brief description of the subproject**

* Objective and characteristics of the subproject:
* Type and current land use:
* Land certification/lease:
* Environmental and social activities (done/to be done):

**Part B: Identification of environmental and social impacts**

|  |  |  |  |
| --- | --- | --- | --- |
| **Environmental impacts/risks** | **Yes**  | **No**  | **Remarks**  |
| **Sector resources**  |  |  |  |
| Is an Environmental and/or Social Assessment required by the law of Seychelles where the subproject activities are to be undertaken? |  |  |  |
| Does it require vast clearing or acquisition of land areas?  |   |   |   |
| Will the subproject require large volumes of construction materials from the local natural resources (sand, gravel, laterite, water, wood construction, etc.)?  |  |  |  |
| Reduced flows or lowering of water table due to abstraction, possibly resulting in salinization? |  |  |  |
| Disruption of coastal processes (e.g., wave, tidal and current regime, sediment transport, flood and storm protection) due to inadequate siting of sub-project?  |  |  |  |
| Introduction of sediments to coastal waters or inland watercourses, or interruption of drainage patterns, as a result of ground clearance, earthworks and operational maintenance of systems? |  |  |  |
| Reduction of water availability for human communities and ecosystems due to abstraction of significant volume of water from surface or ground water sources for supply to aquaculture system? |  |  |  |
| Dust and emissions from small-scale construction activities, and from vehicles and motorized vessels, could affect human health, vegetation and wildlife? |  |  |  |
| **Biodiversity** |  |  |  |
| Will the subproject cause impacts on endemic, rare, vulnerable species (i.e. IUCN Red List species) and or important economic, ecological, physical cultural resources and components  |   |   |   |
| Are there any areas of environmental or ecological sensitivity that could be adversely affected (loss, degradation or fragmentation of protected or ecologically sensitive areas) by the subproject? E.g., forests, wetlands (lakes, rivers, seasonal floodplains), etc.  |   |   |   |
| Establishment of populations or genetic mixing with wild populations caused by accidental release of cultured species (especially non-native ones), leading to negative impacts on local flora and fauna? |  |  |  |
| If the subproject is outside protected areas, but at a short distance from protected areas, could it adversely affect the ecology within the protected area? (e.g. interference with the flight of birds, migration of mammals)  |   |   |   |
| Degradation of native populations due to spread of diseases from cultured species? |  |  |  |
| Further development, increased disturbance and pressure on natural resources due to development of projects in previously undeveloped areas? |  |  |  |
| Loss of plant species and habitats of conservation interest due to earthworks and clearance? |  |  |  |
| Noise and vibration from small-scale construction activities, and from vehicles and motorized vessels, which may disturb sensitive noise receptors (human and fauna, including fish and marine mammals)? |  |  |  |
| Excessive or unregulated capture of a small range of target species and accidental capture of other non-targeted species may deplete stocks and place pressure on local food resources? |  |  |  |
| Direct mortality of target and non-target species, leading to depletion of their populations, including involuntary capture in lost nets? |  |  |  |
| **Geology and Soils**  |  |  |  |
| From the geological or soil point of view are there unstable areas (erosion, landslide, collapse)?  |   |   |   |
| Excess consumption of materials, generation of wastes/emissions, pollution of soils and water due to inefficient waste management during construction, operation and maintenance; in particular, impacts of wastewater contaminated with nutrients and chemicals? |  |  |  |
| Loss, damage or disruption of soil/sediments during small-scale construction works?  |  |  |  |
| Interruption or disruption of surface and groundwater flows from construction, excavation and ground clearance? |  |  |  |
| Loss, damage or disruption of soil/sediments during construction and maintenance? |  |  |  |
| Release of hazardous substances during construction or maintenance (e.g., accidental spills and leaks) leading to soil, surface or groundwater contamination? |  |  |  |
| Are there any areas at risk of soil salinization?  |   |   |   |
| **Landscape/aesthetics**  |  |  |  |
| Will the subproject have any adverse effect on the aesthetic value of the landscape?  |   |   |   |
| **Pollution**  |  |  |  |
| Is the subproject likely to cause high levels of noise?  |   |   |   |
| Has the subproject the potential to generate significant amounts of solid and liquid wastes? (i.e. waste oils, high BOD effluents, heavy metals, other toxic chemicals, pesticides, fertilizer pollution, etc.)  |   |   |   |
| If "yes" has the subproject client prepared a plan for waste collection and disposal or management?  |   |   |   |
| **Environmental and social concerns**  | Yes  | No  | Remarks  |
| Is there Environmental and Social Management Capacity and Equipment?  |   |   |   |
| Is there any risk that subproject could affect the quality of surface water, groundwater, drinking water sources  |   |   |   |
| Has the subproject any potential of affecting the atmosphere and causing air pollution (dust, PM10, various gases such NOx, SO2, etc.)  |   |   |   |
| **Health and Safety**  |  |  |  |
| Will the project require use of a work force? |  |  |  |
| Does the subproject have the potential to lead to risks of accident for workers and communities?  |   |   |   |
| Is there a risk for increased occurrence of communicable diseases, including HIV/AIDS and sexually transmitted diseases (STDs) due to interaction between any non-local workers and local communities? |   |   |   |
| Does the subproject have the potential to lead to an increase in the population of disease vectors? Malaria, Intestinal and Urinary Bilharzia and others  |   |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Social impacts/risks** | Yes | No | Remarks |
| **Land tenure** |  |  |  |
| Does the site selected for the subproject activities have a land title/ lease? |  |  |  |
| **Lifestyle** |  |  |  |
| Does the subproject have any potential of causing alterations in the lifestyle of local people? |  |  |  |
| Could the subproject lead to the accentuation of social inequalities?  |  |  |  |
| Real or perceived disruption to normal community life, through the physical presence of a workforce? |  |  |  |
| Does the subproject have the potential to lead to any social conflicts? |  |  |  |
| **Historical, archaeological or cultural sites**  |  |  |  |
| Has the subproject the potential to displace or damage cultural/archeological/historical heritage sites? |  |  |  |
| **Loss of/loss of access to land, resources, assets**  |  |  |  |
| Will the activity require that land (public or private) be acquired (temporarily or permanently) for its development? |  |  |  |
| Does the subproject lead to physical displacement of people? |  |  |  |
| Does the subproject lead to economic displacement? |  |  |  |
| Are the assets/activities affected by economic displacement equivalent to or less than 10% of the PAP’s productive assets? |  |  |  |
| Does the subproject restrict people’s access to legally designated parks and protected areas?  |  |  |  |
| Can the subproject lead to adverse effects on resources’ availability or quality of them?  |  |  |  |
| **Local Incomes**  |  |  |  |
| Does the subproject result in adverse impacts on people livelihoods? |  |  |  |
| Does the subproject create temporary or permanent jobs?  |  |  |  |
| Does the subproject promote and/or create other income generating activities? |  |  |  |
| **Gender Concerns**  |  |  |  |
| Does the subproject take into account specifically the needs and concerns of women and other vulnerable groups? |  |  |  |
| Does the subproject promote the integration of women and other vulnerable groups in its development? |  |  |  |
| **Stakeholder Engagement and Consultations** |  |  |  |
| Have stakeholder consultations been initiated? |  |  |  |
| Have environmental and social impacts and risks identified been shared with the community/key stakeholders? |  |  |  |
| **Environmental and Social Capacity** |  |  |  |
| Is there Environmental and Social Management Capacity?  |  |  |  |

**Public Consultation and Participation**

Have public consultation and participation been sought?

Yes\_\_\_\_ No\_\_\_

If “Yes”, briefly describe the measures taken to this effect.

If no or minimal E&S impacts have been identified from the screening above, no safeguards instrument would be required for the subproject. In certain cases, the proponent may be required to provide specific mitigation measures for those minimal impacts.

**Part C:** **Assessment of significance of environmental and social risks and mitigation**

For all identified risks, rate the significance of the risk and briefly describe the measures taken to avoid/reduce/mitigate/compensate them.

|  |
| --- |
| Use Tables 1 and 2 (in the ESMF) as guides, rate the impact and probability of each risk identified on a scale of 1 to 5, and use table 3 as a guide to rate the significance of each risk  |
| **Potential environmental and social risks**  | **Impact** **(1-5)**  | **Probability (1-5)**  | **Significance (Low,** **Moderate, High)**  | **Proposed mitigation measures** |
|   |   |   |   |   |
|  |  |  |  |  |
|   |   |   |   |   |
|  |  |  |  |  |
|  |  |  |  |  |

**Table 1: Rating “Impact” of a Risk**

|  |  |  |  |
| --- | --- | --- | --- |
| **Impacts Category** | **Description** | **(Ir)reversible** | **Cumulative Impacts** |
| None | No impact | No adverse impacts on communities, individuals and/or environment | No |
| Negligible | The impact has no significant risk toenvironment either short term or long term | Negligible adverse impacts on communities, individuals, and/or environment | No |
| Minor | The impact is short term and cause very limited risk to the environment | Limited impacts in terms of magnitude (e.g. small affected area, low number of people affected) and duration (short), may be easily avoided, managed, mitigated | No |
| Moderate | Impacts give rise to some concern, may cause long term environmental problems but are likely short term and acceptable | Adverse impacts on people and/or environment of medium magnitude, spatial extent and duration, (mostly temporary, reversible). Such risk levels which can be avoided or have mitigation measures which can reduce the potential impact | May or may not |
| Major | Impact is long term, large scale environmental risk | Significant adverse impacts on human populations and/or environment. Adverse impacts high in magnitude and/or spatial extent (e.g. large geographic area, large number of people, transboundary impacts, cumulative impacts) and duration (e.g. long-term, permanent and/or irreversible); areas impacted include areas of high value and sensitivity (e.g. valuable ecosystems, critical habitats); adverse impacts to rights, lands, resources and territories of indigenous peoples; involve significant displacement | Yes |

**Table 2: Rating “Probability” of a Risk**

|  |  |
| --- | --- |
| **Score** | **Rating** |
| 5 | Expected |
| 4 | Highly Likely |
| 3 | Moderately likely |
| 2 | Not Likely |
| 1 | Slight  |

Source: adapted from UNDP, 2016, p. 17.

**Table 3**

**Determining “Significance” of a Risk**



**Part D: Project classification and requested environmental and social assessment**

Project classified as category:

A B C

|  |
| --- |
| **Environmental and Social Instruments** |
| Environmental and Social Impact Assessment (ESIA)  |  |
| Environmental and Social Management Plan (ESMP) |  |
| Health, Safety Management Plan (HSMP) |  |
| Waste Management Plan (WMP) |  |
| Resettlement Action Plan (RAP) |  |
|  Livelihood Restoration Plan (LRP) |  |
| Any other relevant instrument? | Yes | No |
| If yes, indicate E&S instrument |  |
| No environmental and social work needed |  |

**Form prepared by**:

Signature: Date:

Name (print): Job Title:

**Form approved by**:

Signature: Date:

Name (print): Job Title:

IV. BLUE BOND FUNDED ACTIVITIES ENVIRONMENTAL AND SOCIAL COMPLIANCE REPORT

**I. ENVIRONMENTAL AND SOCIAL COMPLIANCE TABLE**

Sub-Project Name/Code: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of Site Visit: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Participants in Site Visit: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name and job title of persons contacted: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name and contact information of community members contacted (if applicable): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**NOTE**: A “YES” answer to any of the questions in the table below indicates a non-compliance or impact.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **QUESTIONS** | **ANSWER** | **BRIEF DESCRIPTION OF IMPACT/NONCOMPLIANCE (INCLUDE LOCATION OF IMPACT)** | **RECOMMENDED ACTIONS** | **FOLLOW-UP ON IMPLEMENTATION OF ACTIONS (IF APPLICABLE)** |
| **YES** | **NO** |
| **ORGANIZATION, REPORTING, TRAINING AND PERMITTING REQUIREMENTS** |  |  |
| Is the Contractor non-compliant with, as applicable, any of the requirements for socio-environmental management established in the works contract and the ESMP (e.g., staffing, management structure, equipment and other material resources (e.g., office space, vehicles, computers, field monitoring equipment, etc.), field inspection instruments and procedures, etc.)? (please specify) |  |  |  |  |  |
| Is the Contractor non-compliant with socio-environmental reporting requirements? (please specify) |  |  |  |  |  |
| Is the Contractor non-compliant with environmental effects monitoring requirements (please specify) |  |  |  |  |  |
| Is the Contractor non-compliant with workers environmental, health and safety training and awareness requirements (please specify) |  |  |  |  |  |
| Is the Contractor non-compliant with the required environmental permitting for the project (e.g., water abstraction, vegetation clearance, etc.) (please specify) |  |  |  |  |  |
| Is the Contractor non-compliant with Seychellois labour laws and international labour standards, in particular in reference to right to receive just compensation and benefits for work, prohibition of forced and child labour, and prevention of sexual harassment and discrimination in the work place on the basis of gender, religion, social origin, etc.? (please specify) |  |  |  |  |  |
| Is the contractor failing to report on the grievances submitted by workers? |  |  |  |  |  |
| Is the Contractor failing to employ women or reducing the number of female employees in disproportionate numbers when compared to dismissed men? (please specify) |  |  |  |  |  |
| Is the Engineer non-compliant with, as applicable, any of the requirements for socio-environmental management established in the supervision/consultant contract and the ESMP (e.g., staffing, management structures, field supervision instruments and procedures, and reporting requirements, etc.)? (please specify) |  |  |  |  |  |
| Is the Engineer non-compliant with socio-environmental reporting requirements? (please specify) |  |  |  |  |  |
| **ENVIRONMENTAL AND SOCIAL IMPACTS**  |  |  |
| Is there standing water on the site? If yes, is there reason to believe the water has been standing longer than 4 days?(Standing water breeds insect disease vectors, particularly mosquitoes. It takes 4 days for the malaria‐bearing anopheles mosquito to hatch and mature to its flying adult form) |  |  |  |  |  |
| Is there erosion from the cleared site or from material stockpiles? Gullying on surrounding lands clearly caused by runoff from the site?(In addition to permanently degrading the site itself, erosion/ runoff from the site can degrade nearby surface waters and damage adjoining lands) |  |  |  |  |  |
| Are fill, sand, and/or gravel being extracted from waterways or ecologically sensitive areas?(Extracting materials from streambeds and wetlands degrades water quality, ruins critical habitat, alters drainage and flow, and can create standing water) |  |  |  |  |  |
| Is demolition debris or construction waste disposed in the open?(These wastes can pose physical hazards, such as broken glass and rusty torn roofing sheets, and toxic hazards, such as leaded paint, and can create breeding habitat for disease vectors) |  |  |  |  |  |
| Are there fuel, oil, paint or chemical spills to ground or streams?(Such spills can contaminate soils, surface waters and groundwater) |  |  |  |  |  |
| Is the site very dusty or noisy?(Dust and noise can have negative impacts on the health of workers and residents located closed to construction site) |  |  |  |  |  |
| Are operation and maintenance of construction plants inadequate and, hence, there is presence of excessive noise, vibrations, fumes and particle emissions? |  |  |  |  |  |
| Are sprinklers lacking or damaged in crushing conveyors to spray mist/water on belts during crushing operations to help control dust? |  |  |  |  |  |
| Are there excessive periods of interruption of access to public transport, or residential, commercial, health or institutional areas and services due to inadequate implementation of traffic control and safety measures during construction? |  |  |  |  |  |
| Are there damages to public utilities and services lines, mains or pipes, and extended periods of interruption of services? |  |  |  |  |  |
| Are quarries and borrow pits being operated in an unsafe or environmentally unsustainable manner?  |  |  |  |  |  |
| Is vegetation being cleared in areas beyond those indicated in contract drawings? |  |  |  |  |  |
| Are there conflicts with local populations due to resource use, in particular water? |  |  |  |  |  |
| Is there inadequate storage and utilization of top soils? |  |  |  |  |  |
| Are there unresolved resettlement and compensation issues? |  |  |  |  |  |
| Are there any manifestations of unintended or unanticipated impacts? (please specify type of impact and location) |  |  |  |  |  |
| **HEALTH AND SAFETY IMPACTS**  |  |  |
| Is a well-marked site boundary absent and is an actively controlled access not provided? |  |  |  |  |  |
| Are good housekeeping practices not in place, and is the site not maintained in a generally orderly condition? |  |  |  |  |  |
| Are safety signs missing—at minimum, to mark site boundary, hardhat areas, explosion and toxic hazards? |  |  |  |  |  |
| Is smoking allowed or not restricted to a designated smoking area well away from flammable materials? |  |  |  |  |  |
| Is First Aid kit missing on site, and there is no one on site familiar with its use and trained in basic first aid? |  |  |  |  |  |
| Drinking water and sanitary facilities are not provided (or are not very close at hand), including hand-wash station? |  |  |  |  |  |
| Is personal protective equipment (PPE) inadequate or does it appear little-used(PPE must be adequate and used consistently to fulfil its intended function: helping protect workers against injuries and disease) |  |  |  |  |  |
| Is scaffolding inadequate (i.e., not able to carry at least 4 times its maximum intended load without settling or displacement)? |  |  |  |  |  |
| Is scaffolding inadequate (i.e., not on solid footing—boxes, loose bricks and stones, etc.)? |  |  |  |  |  |
| Is scaffolding inadequate (i.e., does not have guardrails, midrails and toeboards)? |  |  |  |  |  |
| Is scaffolding inadequate (i.e., not at least 3 meters from any electric power line)? |  |  |  |  |  |
| Are scaffolding inspections insufficient (i.e., not inspected each day by a competent manager)? |  |  |  |  |  |
| Is fall protection inadequate (i.e., there are no guardrails or at least ropes near the edge of floors and roofs where a drop is greater than 2 meters. Where not possible, workers in these areas do not wear a body harness and rope)? |  |  |  |  |  |
| Are trenches inadequate (i.e., spoils are not maintained at least 1 meter back from edge of trench)? |  |  |  |  |  |
| Are trenches inadequate (i.e., trench walls are not shored or sloped back for any trench 1.75 meters or deeper)? |  |  |  |  |  |
| Are trenches inadequate (i.e., for any trench 1.75 meters or deeper, there is not a means of exit (ladder, stair, ramp) at least every 10 meters? |  |  |  |  |  |
| Is leaded paint or asbestos in any form used in new construction? |  |  |  |  |  |
| Are painted surfaces being scraped or sanded?(Paint containing lead is very common in Africa. Scraping or sanding releases lead dust, a toxic health hazard to workers) |  |  |  |  |  |
| Are asbestos roofing sheets, linoleum, fibreboard ceiling or wall panels or pipe insulation being removed/disturbed?(Asbestos should be assumed to be present in all these products. When disturbed, carcinogenic asbestos fibres may be released) |  |  |  |  |  |
| For rehabilitation or demolition, the contractor failed to check prior to commencing work whether lead-based paint, asbestos (including roofing sheets) and other toxics are present? |  |  |  |  |  |
| **LOSS OF/LOSS OF ACCESS TO LAND, RESOURCES, ASSETS** |  |  |
| Have appropriate livelihood restoration measures been put in place? |  |  |  |  |  |
| Have all project affected persons (PAPs) been identified, including marginalized groups? |  |  |  |  |  |
| **STAKEHOLDER ENGAGEMENT AND CONSULTATIONS** |  |  |
| Have stakeholder consultations been initiated? |  |  |  |  |  |
| How many grievances have been registered in the reporting period? |  |  |  |  |  |
| How many have been resolved? |  |  |  |  |  |
| **GENDER CONCERN** |  |  |
| Does the subproject take into account specifically the needs and concerns of women and other vulnerable groups? |  |  |  |  |  |
| Does the subproject promote the integration of women and other vulnerable groups in its development? |  |  |  |  |  |
| **OTHER ELEMENTS FROM THE ESMP** | **YES** | **NO** | **REMARKS** | **RECOMMENDED ACTIONS** | **OTHER ELEMENTS FROM THE ESMP** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

1. **MAJOR NON-COMPLIANCES AND IMPACTS, AND RECOMMENDED ACTIONS FOR FOLLOW-UP**

Based on the Environmental and Social Compliance Table, list in the table below the major non-compliances and impacts detected, as well as the main actions recommended to address them. This table will serve to prioritize the follow-up of those actions in future oversight visits.

|  |  |  |
| --- | --- | --- |
| **BRIEF DESCRIPTION OF IMPACT/NONCOMPLIANCE (INCLUDE LOCATION OF IMPACT)** | **RECOMMENDED ACTIONS** | **FOLLOW-UP ON IMPLEMENTATION OF ACTIONS (IF APPLICABLE)** |
|
|  |  |  |
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|  |  |  |

**Report prepared by**:

Signature: Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name (print): Job Title:

Report approved by:

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name (print): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Job Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_