GLO-DJIGBÉ
INDUSTRIAL ZONE ZÈ-BÉNIN

BUSINESS-LEVEL ENVIRONMENTAL AND SOCIAL MANAGEMENT REQUIREMENTS

GDIZ
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APPENDICES

Appendix A

Scope of the ESMR

Approach to Identification of Management Measures

The Societe d'Investissement et de Promotion de L'Industrie Benin (SIPI) is managing the planning, construction, and operation of the Glo-Djigbe Industrial Zone (GDIZ) mixed use industrial, commercial and residential zone in Benin, west Africa.

This Environmental and Social Management Requirements (ESMR) provides a set of environmental and social management measures that will be applicable to the construction and operation of individual businesses that develop within the GDIZ.

The measures defined in this ESMR are minimum requirements, and individual businesses will need to identify and implement any additional requirements to manage their environmental and social impacts.

In line with the GDIZ Environmental and Social Governance Framework and the requirements of national law, businesses will be required to prepare and receive certification on Environmental and Social Impact Assessments for their activities.

The ESMR covers the following key areas:

- Emissions to Air;
- Wastewater;
- Waste;
- Community Health, Safety and Security;
- Hazardous Materials;
- Noise;
- Labour Management;
- Worker Accommodation;
- Occupational Health and Safety;
- Emergency Preparedness and Response;
- Supply Chain;
- Biodiversity; and
- Monitoring Inspection and Audit.

It is the responsibility of each business to identify and apply the requirements of this ESMR that are applicable to the potential environmental and social impacts of their activities.

1. ENVIRONMENTAL AND SOCIAL MANAGEMENT REQUIREMENT

SIPI wants to ensure that the industrial and processing companies that develop in the area have put in place adequate environmental and social management measures to avoid and minimize the negative environmental and social impacts resulting from their construction and operation. exploitation

This document provides a set of environmental and social management measures that will be applicable to the construction and operation of individual businesses that develop within the GDIZ. The investor commit to adhere to the minimum requirements as outlined in the General Operational Guidelines.

The measures defined in this ESMR are minimum requirements, and individual businesses will need to identify and implement any additional requirements to manage their environmental and social impacts. Alternative measures to those outlined in the ESMR are acceptable so long as impacts are mitigated to the same extent or better.

Compliance of specific measures may not be required where either one or more of the following applies:

a) the investor business can demonstrate that there are no environmental or social risks related to the specific measure, and therefore the measure is not applicable or is not proportionate to the actual risk;

b) the investor business has alternative approaches for specific measures that can achieve the same outcome in mitigating the related risk.

Table 1 1 provides an indication of which sections of this ESMR will be applicable to different business types. This is indicative only, and each business is responsible for identifying and applying the requirements of this ESMR that are applicable to the potential environmental and social impacts of their activities.

Tableau 1-1 - Applicability of ESMR sections to different business types (indicative only)

	General	Emissions to Air	GHG Emissions, Energy and Water Use	Wastewater	Waste	Community H&S	Hazardous Materials	Noise	Labour	Worker Accommo-dation	Occupational H&S	Emergency preparedness	Supply chain	Biodiversity	Monitoring
All businesses	✓		✓		✓	✓			✓		✓	✓		✓	✓
Businesses that use com-bustion and / or gases in their productions processes		✓													
Businesses that use water for production processes				✓											
Businesses that use chemicals, fuels, oils or other hazardous materials							✓								
Businesses that have machinery and processes that produce noticeable levels of noise								✓							
Businesses that process or transform raw or other materials, components, goods or products													✓		
Businesses that provide accommodation to their workers, either within or outside GDIZ										✓					

✓= Section of the ESMR will be applicable to the business as a minimum standard. In some cases, some individual measures contained within the section may not be applicable. For example, some Occupational Health and Safety measures may not be applicable for those businesses without hazardous production processes.
Businesses remain responsible for identifying the applicability of each section for their business, even for those that are not indicated with a ✓.

2. GENERAL

2.1 Compliance with law and regulation

Businesses are responsible for identifying and adhering to all applicable national laws and regulations. If there is conflict between any elements of this ESMR and the requirements of national law and regulation, the business must ensure that, as a minimum, the requirements of national law and regulation are addressed.

2.2 Required management roles

2.2.1 Each business must have resources delegated to have responsibility for the following roles:

- Environmental Manager – responsible for ensuring compliance with environmental regulations and standards and the measures specified in Sections 3, 4, 5, 6, 7 and 13.
- Health and Safety Manager - responsible for ensuring compliance with health and safety law and the measures specified in Sections 12, 11 and 13.
- Human Resources Manager – responsible for ensuring compliance with labour management law and the measures specified in section 10, if applicable, Section 11, 12 and 13.

For smaller businesses, a single person could have responsibility for more than one role.

2.2.2 The names of individuals who have been designated the roles stated in section 2.2.1 must be clearly communicated to workers through workplace noticeboards, and notified to GDIZ and the Single Window[1].

2.2.3 The roles stated in section 2.2.1 must be available to take part in the inspections and audits as described in Section 15.

1 Single Window - Part of the Administrative Authority of GDIZ, responsible for the administrative formalities and procedures for all stakeholders in the SEZ, including coordinating permit applications and the inspection, monitoring and audit of businesses on behalf of government.

2.3 Management of Contractors

The business must ensure that any contractors and third parties that provide workers to the business adhere to the labour management requirements stated in section 10, with the exception of sub-section 10.8. As a minimum, the business must:

- State these requirements as part of their contractual terms with the contractor or third party.
- Check that the contractor or third party is adhering to the requirements, through discussions with their managers and workers.

2.4 Reporting of environmental performance

2.4.1 All businesses must collect and report to SIPI on their water consumption, energy consumption, waste production and GHG emissions. SIPI will provide templates for the collection and reporting of this data on a regular basis.

2.4.2 Businesses must identify and consider options for reducing consumption of water and energy, reducing GHG emissions and reducing the production of waste.

3. EMISSIONS TO AIR

3.1 Introduction

The business is required to control and prevent harm to human health or the environment from their emissions to air. The general measures specified below are to be applied for all businesses as applicable. All other industry specific measures are to be implemented by relevant businesses in addition to the general measures.

Table 3 1 National and International Air Quality Guidelines[2]

Parameter	Averaging Period	National Legal Thresholds (µg/m3)	International Guideline (µg/m3)
		National	IFC
Sulphur dioxide (SO2)	24-hour	200	**20**
	10 minutes	-	**500**
Nitrogen dioxide (NO2)	1-hour	-	**200**
	1-year	100	**40**
Particulate Matter PM10	1-year	50	**20**
	24-hour	230	**50**
Particulate Matter PM2.5	1-year	-	**10**
	24-hour	-	**25**
Ozone	8-hour daily maximum	**80**	100
Businesses must be in compliance with National legal thresholds and should work towards compliance with international guidelines particularly for Category A businesses.			

3.2 Dust and Particulate Matter

3.2.1 General

The business is to apply the following general requirements:

- Remove particulate matter from gas streams using cyclones, scrubbers, electrostatic precipitators (ESPs), bag filters, fabric filters or/and ceramic filters, as necessary;

2 Developed using the IFC EHS General Guidelines (1.1 Air Emissions and Ambient Air Quality) and Decree 2001-110 of 4 April 2001.

- Regularly monitor and maintain filtration systems;
- Cover skips and vessels, stockpiles, and any other powdered products, especially outdoors;
- Enclose silos and containers used for bulk storage of powders and fine materials;
- Where enclosure is not feasible, use sprays, windbreaks, sweeping, sprinkling, and other stockpile management techniques to suppress dust;
- Use closed conveyors equipped with filters to clean transport air prior to release;
- When handling, transferring, or transporting powdered materials, do so within a contained environment or an environment fitted with a capture device; and
- Apply good housekeeping measures (e.g., frequent cleaning and sweeping of facility).

3.2.2 Pharmaceuticals

- Collection of particulate matter using air filtration units and recycling.
- Installation of high efficiency particulate air (HEPA) filters in the heating, ventilating and air conditioning (HVAC) systems to control particulate matter emissions internally and externally as well as to prevent indoor cross contamination.
- Segregate air ducts to prevent air cross-contamination from different processes and to ease the air stream treatment.

3.2.3 Recycling

- Where possible, maintain wetness on the metal surface in order to prevent or minimize dust production.

3.2.4 Construction Materials

- Utilise simple, linear layouts for materials handling operations to reduce the need for multiple transfer points.
- Regular cleaning of return belts in the conveyor belt systems.

- Implement routine maintenance and good housekeeping to keep small air leaks and spills to a minimum.

3.3 VOCs and Oil Mists

3.3.1 General

The business must put in place plans to reduce or substitute the use of solvents and other materials which have a high VOC content with products that have lower volatilities.

3.3.2 Pharmaceuticals

The business must undertake the following:

- Implement a leak detection and repair (LDAR) program that controls fugitive emissions by regularly monitoring to detect leaks, and implementing repairs within a predefined time period;
- Collect vapours through air extractors and treat the gas stream by removing VOCs with control devices such as condensers or activated carbon absorption;
- Reduce equipment operating temperatures, where possible;
- Adopt closed circuits under a nitrogen atmosphere, for drying operations;
- Utilise closed-loop liquid and gas collection equipment for cleaning of reactors and other equipment;
- Vent emissions from sterilization chambers into control devices such as carbon adsorption or catalytic converters;
- Condense and distil solvents emitted from reactors or distillation units, and where possible install cryogenic condensers, to reduce the gas stream temperature below dew point to achieve higher VOC recovery efficiencies;
- Install wet scrubbers (or gas absorbers), which may remove VOCs as well as other gaseous pollutants from a gas stream, and addition of hypochlorite to the scrubber in order to reduce emissions of nuisance odours; and

- Install activated carbon adsorption or destructive control devices such as thermal oxidation / incineration, catalytic incinerators, enclosed oxidizing flares, or other.

3.4 Odours

3.4.1 General

All applicable businesses are to:

- Construct exhaust stack heights that are consistent Good Engineering Practice (GEP) set out in Figure 3-1.
- Utilise wet scrubbers to remove odours with a high affinity to water.

$H_G = H + 1{,}5L$ where

H_G = GEP stack height measured from the ground level

elevation at the base of the stack

H = Height of nearby structure(s) above the base of the

stake

L = Lesser dimension, heigth (h) or width (w), of nearby

structures

« Nearby structure" = Structures within/touching a radius

of 5L but less than 800 m.

Figure 3 1: Stack Height (Source: Annex 1.1.3 of the WBG EHS General Guidelines (2007))

3.4.2 Agro-processing

- During the procurement of air emission systems for smoking units, install integrated systems that combine air cleaning, incineration, and heat recovery .
- Recirculate exhaust gas from frying and other cooking operations to the burner.
- Minimize storage duration for solid waste to avoid rot and decay.

- Operate facilities under partial vacuum to prevent fugitive odor emission.
- Regularly inspect chilling and freezing equipment to monitor the loss of refrigerants.

3.4.3 Pharmaceuticals

The following odour management strategies are to be implemented by the business:

- Post-combustion of venting gases; and
- Condensation of vapours combined with scrubbers.

3.4.4 Phosphate Fertilizer

Odor emissions to be reduced by the business by selecting high grade phosphate rock with low contents of organic compounds and ferrous salts.

3.5 Sulphur Dioxides

Construction Materials

The following odour management strategies are to be implemented by the business:

- Select fuel sources with lower sulphur content;
- Use wet or dry scrubbers;
- Inject hydrated lime or bicarbonate into the exhausted gas stream prior to use of filters; and
- Select quarried materials with lower volatile sulphur content.

3.6 Nitrogen Oxides

3.6.1 Construction Materials

- Maintain secondary air flow as low as possible (e.g. oxygen reduction); and
- Use low NOx burners to avoid localized emission hot spots.

3.6.2 Nitrogenous Fertilizers;

- Install selective catalytic reduction (SCR) units operating around 200°C with various catalysts (platinum, vanadium pentoxide, zeolites, etc.) or, less frequently, non-selective catalytic reduction (NSCR) units;
- Integrate a decomposition chamber in the burner to reduce the production of N2O by increasing the residence time in the oxidation reactor;
- Use a selective de- N2O catalyst in the high temperature zone (between 800 and 950 °C) of the oxidation reactor; and
- Install a combined N2O and NOX abatement reactor between the final tail gas heater and the tail gas turbine. The reactor consists of two catalyst layers (Fe zeolite) and an intermediate injection of NH3.

3.6.3 Phosphate Fertilizer

- Reduce NOx emission from nitric acid use in phosphate rock digestion by controlling the reactor temperature (high temperature leads to excessive NOx formation) optimizing the rock / acid ratio, and adding urea solution;
- Reduce NOx emissions by selecting high grade phosphate rock with low contents of organic compounds and ferrous salts;
- Treat gases from the digestion reactor in a spray tower scrubber to recover NOx and fluorine compounds. The pH may be adjusted by the addition of ammonia; and
- Minimize contact between wastes containing NOx and NH3.

3.7 Heavy Metals, Waste Fuels, and Other Air Pollution

3.7.1 Construction Materials

Implement monitoring and control of the volatile heavy metal content in the input materials and waste fuels though implementation of materials selection. Control options may vary, but can include wet scrubbers and activated carbon adsorption, dependant on the type of volatile metals present in the flue gas.

3.7.2 Phosphate Fertilizers

- Reduce aerosol emissions by installing cyclones and scrubbers.
- Select appropriate valves, flanges, fittings during design, operation, and maintenance.
- Install leak detection and continuous monitoring in all sensitive areas.
- Use of open vents in tank roofs should be avoided by installing pressure relief valves.
- All storage and unloading stations should be installed with vapour recovery units and processed using vapour processing systems, such as carbon adsorption, refrigeration, recycling collecting and burning.
- Use of direct granulation may reduce the levels of fugitive emissions compared with curing emissions from indirect granulation. If indirect granulation is used, the curing section should be an indoor system with vents connected to a scrubbing system or to the granulation section.
- Emissions from granulation should be minimized through application of surge hoppers to product size distribution measurement systems for granulation recycle control.

3.7.3 Nitrogenous Fertilizers

- Connect both safety relief valves/seals of the ammonia/urea pumps, and tank vents to a flare.
- Utilise leak detection methods to detect fugitive emissions from process and storage.
- Implement maintenance programs, particularly in stuffing boxes on valve stems and seals on relief valves, to reduce or eliminate releases.
- Ensure that a sufficient air supply is provided to the oxidizer and absorber.
- Prevent high temperatures in the cooler-condenser and absorber.

- Develop a maintenance program to prevent operation with faulty equipment such as compressors or pumps that lead to lower pressures and leaks, and decrease plant efficiency.
- Collection of solid urea spillages on a dry basis, avoiding the wet washing of surfaces.
- Adopt the lowest practical melt temperature to reduce emissions of ammonia and ammonium nitrate (and calcium carbonate in calcium ammonium nitrate (CAN) production) from prilling and granulation emissions.

3.8 Fugitive Emissions

General

- Select appropriate valves, flanges, fittings during design, operation, and maintenance.
- Install leak detection and continuous monitoring in all sensitive areas.
- Avoid use of open vents in tank roofs by installing pressure relief valves.
- All storage and unloading stations should be installed with vapour recovery units and processed using vapour processing systems, such as carbon adsorption, refrigeration, recycling collecting and burning.
- Site specific dust management plans to be developed by each business for their facilities and transport networks to control dust emissions. The dust management plan should include the development of a maintenance/delivery schedule to avoid large number of vehicles running simultaneously at the facility and reduce idling where possible.
- A Traffic Management Plan to be developed by each business to manage vehicles flows and avoid build-up of congestion on entering and existing the GDIZ site at either the main or secondary entrance
- A monitoring campaign shall be undertaken to measure the PM10, PM2.5, NO2, and NOx levels emitted by individual businesses at source on a yearly basis.

3.9 Others

- Site specific dust management plans to be developed by each business for their facilities and transport networks to control dust emissions. The dust management plan should include the development of a maintenance/delivery schedule to avoid large number of vehicles running simultaneously at the facility and reduce idling where possible.

- A Traffic Management Plan to be developed by each business to manage vehicles flows and avoid build-up of congestion on entering and existing the GDIZ site at either the main or secondary entrance.

- A monitoring campaign shall be undertaken to measure the PM10, PM2.5, NO2, and NOx, SO2 levels emitted by individual businesses at source on a yearly basis.

4. GREENHOUSE GAS (GHG) EMISSIONS, ENERGY AND WATER USE

To ensure efficient resource utilisation the following general measures are required.

4.1.1 Businesses must monitor on a monthly basis its GHG emissions, water consumption, energy consumption and waste production from its operations. SIPI will provide templates for the collection and reporting of this data on a regular basis. On a monthly basis monthly monitoring data will be shared with SIPI via the reporting template provided for input into the GDIZ Carbon Reduction Action Plan.

4.1.2 Businesses must set targets, and identify options / measures to support in achieving these targets, for reducing consumption of water and energy, reducing GHG emissions and reducing the production of waste.

4.1.3 Regularly review reduction targets to ensure appropriateness and alignment with GDIZ Carbon Reduction Action Plan.

4.1.4 Individual businesses shall work with SIPI on arrival to the zone to define a daily water use to be provided by the common infrastructure e.g., borewells and water distribution system, which can then be developed into a range with an expected daily high and low. Businesses shall then monitor water consumption, monthly, against this figure. Results will be recorded and reported to SIPI.

5. WASTEWATER

5.1 Introduction

The GDIZ will have a wastewater management system, however it is the responsibility of each business to treat its industrial wastewater to meet the criteria of GDIZ, shown in Table 5 1, before it joins the GDIZ wastewater network and treated at the Common Effluent Treatment Plant (CETP). The general management measures presented in this Section are to be implemented by all businesses. All other industry specific measures are to be implemented by relevant businesses in addition to the general measures.

Table 5 1 GDIZ CETP Input Wastewater Quality Parameters[3]

Parameters	Units	Input value of CETP
Temperature	oC	10 - 40
pH	-	4.0 – 10
Biochemical Oxygen Demand (BOD5)	mg/l	4,500
Chemical Oxygen Demand (COD)	mg/l	5,500
Total Dissolved Solids (TDS)	mg/l	<1,200
Total Suspended Solids (TSS)	mg/l	1,200
Colour	Pt-Co	50
Total Nitrogen	mg/l	60
Total Phosphorus	mg/l	75
Oil and Grease	mg/l	300
Total Coliform Bacteria	MPN* / 100 ml	10,000
Ammonium (as N)	mg/l	60
Chloride (Cl-)	mg/l	600
* MPN = Most Probable Number		

3 Developed using the ARISE Wastewater Design Summary Document

5.2 General

The business is to apply the following general wastewater requirements:

- Understand the quality, quantity, frequency and sources of liquid effluents in its installations. This includes knowledge about the locations, routes and integrity of internal drainage systems and discharge points;
- Plan and implement the segregation of liquid effluents along industrial, utility, sanitary, and stormwater categories, in order to limit the volume of water requiring specialized treatment. Characteristics of individual streams may also be used for source segregation.
- Identify opportunities to prevent or reduce wastewater pollution through such measures as recycle/reuse within the facility, input substitution, or process modification (e.g. change of technology or operating conditions/modes).
- It is prohibited to discharge industrial wastewater into stormwater drainage of any kind;
- Any discharge of wastewater into a receiving environment must comply at minimum with the requirements contained in the discharge permit obtained through Article 4 of Decree n°2001-109 of 4 April 2001;
- Businesses must not alter the authorized activities and processes, stated within their permit, in a way that will lower the quality of wastewater discharged;
- Each discharge pipe shall be fitted with a point of access for sampling and measuring;
- If the CETP is being used for discharges of substances and toxic/hazardous substances within industrial wastewater, they must comply with the CETP input parameters outlined in Table 5 1. In any instances where the CETP is not being used, all wastewater discharges must meet the standards presented in Decree n°2001-109 of 4 April 2001;
- Where required, businesses are obliged to carry out sampling of their wastewater once a month to verify its compliance with the

CETP input parameters or standards set out in Decree n°2001-109 of 4 April 2001, as applicable depending on the discharge option as set out in the preceding bullet. Results of monthly sampling should be recorded and maintained by the business, alongside sending a copy to the Beninese Environment Agency;

- In the event of an accidental discharge of substances that will impact negatively on the environment the business shall notify the competent authorities immediately using established notification procedures as part of the emergency response plan (ERP); and
- Utilise heat recovery methods (also energy efficiency improvements) or other cooling methods to reduce the temperature of heated water before discharge to the receiving environment[4].

5.3 Industrial Process Wastewater Treatment

5.3.1 General

The business is to apply the following general requirements related to industrial process wastewater treatment:

- Substitute materials for those that produce less pollution;
- Use impermeable material for the constructions of floors;
- Utilise good general housekeeping and clean using detergents with minimal environmental impact and compatibility with subsequent wastewater treatment processes; and
- One or more of the following techniques is to be implemented in order to treat industrial process wastewaters:
  - Grease traps;
  - Skimmers;
  - Dissolved air floatation or oil water separators for separation of oils and floatable solids;

4 EHS Guidelines advise that discharged water should not result in an increase greater than 3°C of ambient temperature at the edge of a scientifically established mixing zone which considers ambient water quality, receiving water use, potential receptors and assimilative capacity among other considerations.

- Filtration for separation of filterable solids;
- Flow and load equalization;
- Sedimentation for suspended solids reduction using clarifiers;
- Biological treatment, typically aerobic treatment, for reduction of soluble organic matter (ie biological oxygen demand - BOD);
- Biological nutrient removal for reduction in nitrogen and phosphorus;
- Chlorination of effluent when disinfection is required; or
- Dewatering and disposal of residuals in designated hazardous waste landfills.

5.3.2 Agro-processing

- Install grids to reduce or avoid the introduction of solid materials into the wastewater drainage system.
- Install trays to catch waste from trimming operations and juice / product on conveyors.
- Provide secondary containment for storage and process vessels to contain spills.
- Ensure regular integrity testing of bulk storage tanks for product and waste.

5.3.3 Pharmaceuticals

- Adopt biodegradable water-based materials for organic solvent-based materials (e.g., tablet coating).
- Recover used solvents and aqueous ammonia by utilising condensation and separation processes, including:
  - Fractioned distillation to recover low-boiling compounds from wastewater streams;
  - Inert gas stripping and condensation to recover volatile compounds from wastewater stream; and
  - Solvent extraction of organic compounds (e.g. high or

refractory halogenated compounds and high COD loads).

5.3.4 Phosphate Fertilizers

Dependant on the processes utilised by the business to produce fertilizers there will be differing pollutants and contaminants produced and therefore different specific measures needed to be implemented to mitigate the impact of said pollutants or contaminants. outlined below are general measures applicable to phosphate fertilizer manufacturing.

- Select phosphate rock with low levels of impurities to produce clean gypsum and reduce potential impacts from disposal of gypsum.
- Consider dry systems for air pollution abatement (versus wet scrubbing) to reduce wastewater generation.
- In the case of wet scrubbing, recycling of scrubber liquids back into the process should be maximized.
- Consider combined treatment of exhaust gases from neutralization, evaporation and granulation. This enables a recycling of all scrubber liquids to the production process and reduce wastewater generation.
- Treat wastewater through a biological treatment with nitrification/denitrification and precipitation of phosphorous compounds.

5.3.5 Nitrogenous Fertilizers

Dependant on the processes utilised by the business to produce fertilizers there will be differing pollutants and contaminants produced and therefore different specific measures needed to be implemented to mitigate the impact of said pollutants or contaminants. Outlined below are general measures applicable to nitrogenous fertilizer manufacturing.

- Condensates are to be steam-stripped to reduce the ammonia content and re-used as boiler make-up water after an ion exchange treatment; or sent to a wastewater treatment plant for treatment with other ammoniacal streams. Steam-stripper emissions may require additional ammoniacal emissions controls.
- Ammonia absorbed from purge and flash gases to be recovered in a closed loop to avoid the occurrence of aqueous ammonia

emissions.

- Soot from gasification in partial oxidation processes are to be recovered and recycled to the process.
- Install submerged tanks to collect plant washings and other contaminated streams from drains for recycling to process or for conveying to the process water treatment unit.
- Steam-inject the NOX compressor to avoid any liquid effluent;
- Treat process water (condensate) by stripping with air or steam with the addition of alkali to liberate ionized ammonia as needed; ion exchange; distillation; or membrane separation processes.

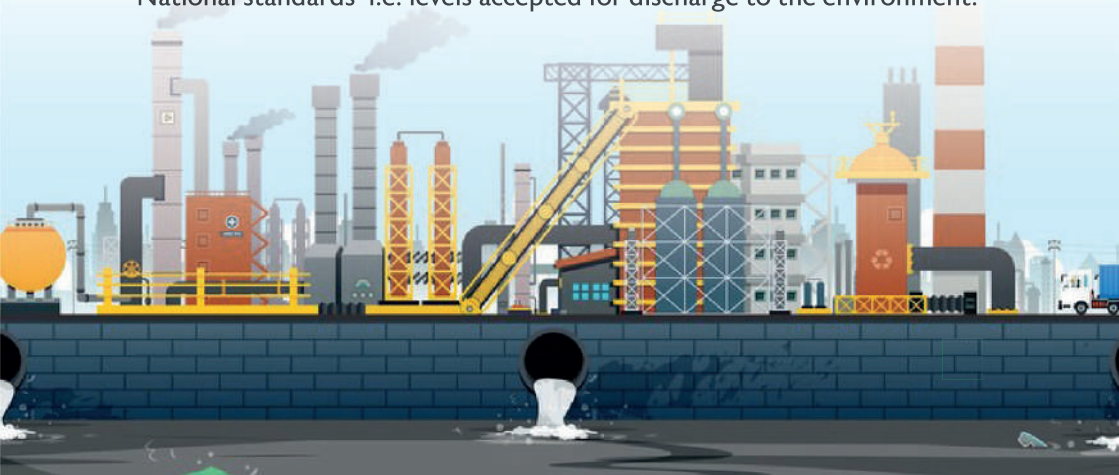
5.4 Other Wastewater Streams

Cover or enclose stockpiles (a pile or storage area for materials to be used in operational processes of the industry) to avoid cross contamination with areas such as waste material pet–coke, coal, and waste material storage.

Implement paving or other lining on the base of stockpiles, instal run-off controls around them, and collect stormwater in a lined basin to allow particulate matter to settle before separation, control and recycling or discharge.

Individual businesses shall monitor on a monthly basis their wastewater effluent prior to leaving their site to ensure compliance with the standards outlined in Section 5, Table 5-1 of the ESMR for input into the CETP.

Individual businesses shall monitor on a quarterly basis their stormwater discharges leaving their site to ensure it is in compliance with National standards i.e. levels accepted for discharge to the environment.



6. WASTE

6.1 Introduction

The guidance presented below is to be applied to all businesses that will be generating, storing, or handling any quantity of waste regardless of industry or size. Solid waste is defined as any material that is discarded through disposal, recycling, burning or incineration. It can be a manufacturing by-product or a commercial product that has become without use. Solid wastes generally include domestic trash and garbage, inert construction / demolition waste, refuse such as scrap metal and empty containers, and residual waste from industrial operations, such as clinker and boiler slag.

The central facilities provided by SIPI will cover common or shared facilities, road cleaning, landscaping, small commercial businesses. The SIPI waste management will include:

- Domestic waste will be collected regularly from and transported to a central transfer station where waste will be sorted into categories – recyclable wastes, biodegradable wastes, non-biodegradable wastes, and non-recyclable wastes. Waste collection vehicles will be categorised into non-biodegradable waste and biodegradable waste. Whilst waste will be sorted at the central transfer station efforts to segregate at source should be carried out including paper, plastics, and biodegradable waste.
- A street sweeper will be deployed.

All industrial businesses are responsible for managing their own waste in accordance with the waste management hierarchy (see Section 6.2), ensuring that where disposal is required appropriate segregation of waste into categories is carried out including but not limited to recyclable waste, biodegradable waste, non-biodegradable waste and non-recyclable wastes. All businesses must contract a licensed waste management company to collect waste on a regular basis. This waste company should be approved by SIPI.

To ensure that the waste management facilities are run appropriately,

businesses will be required to implement the following key measures with respect to waste management.

6.2 Waste Management Planning and Prevention

Develop a Waste Management Plan and review waste streams prior to construction and again prior to operation to identify the expected waste generation, pollution prevention opportunities, necessary treatment, storage, and disposal infrastructure. Waste streams should then be characterized by type, quantities, and potential use/disposal.

Businesses should establish a waste management hierarchy that considers prevention, reduction, reuse, recovery, recycling, removal and finally disposal of wastes.

Implement waste source reduction utilising the following prevention techniques:

- Substitute raw materials or inputs for those with less hazardous or toxic materials, or those that generate less waste when processed.
- Implement inventory control[5] to reduce the amount of waste resulting from stock which is out-of-date, off specification, contaminated, damaged, or excess to plant needs.
- Request the returning of, or return usable materials such as containers, packaging etc.

Where industrial waste is produced the facility generating said waste is obliged under Decree 2003-332 of 27 August 2003, to keep accounts of the quantity of wastes, inform the administration of their waste generation, and the method of recovery or disposal.

Educate workers on and implement Lean manufacturing practices[6], principles and tools.

6.3 Recycling and Reusing

In accordance with the Strategic Waste Management Study to be

5 Managing and logging items from the time they arrive at the business to their final destination
6 https://www.epa.gov/sustainability/lean-manufacturing-and-environment

undertaken by SIPI as outlined in the SESA, it is expected that a suitable solution for recycling of waste will be provided to individual businesses. As such, businesses are required to undertake the following:

- Provide segregated waste collection containers which should comprise or similar the following categories: recyclable wastes, biodegradable wastes, non-biodegradable wastes, and non-recyclable wastes, to ensure efficient means of collection.
- Implement objectives for recycling rates and use a formal tracker to monitor with the overall aim of continuous improvement to these rates.
- Training and incentives to be provided to employees to help meet objectives.

6.4 Treatment and Disposal

- All businesses must contract a licensed waste management company.
- All waste must be treated or disposed of at an appropriately permitted facility applicable to the waste generated e.g., composting for organic non-hazardous waste, and properly designed, permitted, and operated landfills for the respective type of waste. Should facilities not be currently available, monitor new facilities which become available to ensure that the most appropriate disposal routes are identified as they emerge.

6.5 Hazardous Waste Management

Biological, chemical, or physical treatment of hazardous waste to render it non-hazardous, can occur on-site or off-site.

Hazardous Wastes are to be segregated from non-hazardous wastes, and stored in a manner that prevents contact between incompatible wastes and allows for inspection to minor or leaks or spills e.g., sufficient space between or physical separation. Hazardous waste facilities are to be designed for the specific materials being stored but should generally include:

- Storage in closed and labelled containers away from direct sunlight, wind and rain.
- Wherever liquid wastes are stored in volumes greater than 220 litres, secondary containment is to be constructed using materials appropriate for the wastes being contained and adequate to prevent loss to the environment. The volume of the secondary containment is required to be at least 110 percent of the largest storage container, or 25 percent of the total storage capacity (whichever is greatest), in that location.
- Adequate ventilation to be provided where volatile wastes are stored.

Hazardous waste storage activities are to be subject to special management action, the following are expected:

- Provision of readily available information on chemical compatibility, including the content labelling of containers;
- Limit access to hazardous waste storage areas to those with adequate training, knowledge or/and experience;
- Set clear boundaries of and signpost hazardous waste storage area;
- Conduct inspections of the waste storage area periodically, and record and keep the findings; and
- Avoid the placing of storage tanks underground or/and the underground piping of hazardous waste;
- Install a fire suppression system and communicate the emergency procedure.

To ensure waste contractors handling, treating, and disposing of hazardous waste are competent and legitimate enterprises, licensed by the relevant regulatory agencies and following good international industry

practice for the waste being handled.

Ensure hazardous waste is managed in line with the Basel Convention and the Rotterdam Convention .

Hazardous wastes are to be transported with the overall aim of preventing or minimizing spills.

When transporting wastes off site, it is expected that:

- Containers are to be secured;
- Containers are correctly labelled with the contents and associated hazards;
- Containers are carefully and properly loaded on to the transporting vehicle; and
- The waste is accompanied by a shipping paper (i.e. manifest) that describes the load and associated hazards.

Generating facilities should consider:

- Have the technical capability to manage their own waste in a manner which reduces the immediate and future impacts to the environment;
- Have the required permits, certifications, and approvals of the 'Ministre chargé de l'environnement', as of Articles 14 of Decree 2003-332 of 27 August 2003; and therefore
- Maintain a register indicating:
- The quantity, nature, origin, and where applicable the destination, frequency of collection, means of transport method of treatment and operations; and
- Any modification made to the installation or to the operations which are carried out to generate the waste.

Hazardous waste materials can be generated in small quantities by many projects through a variety of activities such as equipment and building maintenance activities. Examples of this type of waste includes spent solvents and oily rags, empty paint cans, chemical containers; used

lubricating oil; used batteries (such as nickel-cadmium or lead acid); and lighting equipment, such as lamps or lamp ballasts. These are to be managed in line within the measures presented above.

6.6 Monitoring Waste Management

Businesses must carry out regular visual inspection of all waste storage collection and storage areas with the aim of identifying any accidental release and, verify labelling and storage is in line with the measures above.

Where significant quantities of hazardous wastes are stored on sites monitoring is to include:

- Inspection of vessels for leaks, drips, or other indications of loss;
- Identification of cracks, corrosion, or damage to tanks, protective equipment, or floors;
- Verification of locks, emergency valves, and other safety devices for easy operation (lubricating if required and employing the practice of keeping locks and safety equipment in standby position when the area is not occupied);
- Checking the operability of emergency systems;
- Documenting results of testing for integrity, emissions, or monitoring stations (air, soil vapour, or groundwater); and
- Documenting any changes to the storage facility, and any significant changes in the quantity of materials in storage.

At least quarterly, inspect waste segregation and collection facilities and practices. Inspections are to include at a minimum evaluation of waste types, volumes, collection practices being employed.

All businesses must monitor the trends and maintain records (using a manifest template to be supplied by SIPI) of waste and hazardous waste generation by type, amount, location and final destination.

Characterizing waste at the beginning of generation of a new waste

stream, and periodically documenting the characteristics and proper management of the waste, especially hazardous wastes.

Regular monitoring of groundwater quality in cases of Hazardous Waste on site storage and/or pre-treatment and disposal.

Maintain monitoring records for hazardous waste collected stored, or shipped is to include:

- Name and identification number of the material(s) composing the hazardous waste;
- Physical state;
- Quantity;
- Tracking documentation;
- Method and date of storage, repackaging, treating, or disposing; and
- Location of each hazardous waste within facility and the quantity at each location.

7. COMMUNITY HEALTH, SAFETY AND SECURITY

7.1 General requirements

7.1.1 Businesses must identify and manage any risks that could occur from their. Community safety risks could occur from accidents or malfunctions, including fire and explosion. For some businesses this risk identification process may require the development of a Hazard Study (section 12.4).

7.1.2 Other community health and safety risks should be managed through the various provisions of this ESMR, including those related to air emissions (section 3), water discharges (section 4), noise (section 9), waste and hazardous materials management (sections 6 and 8), management of worker accommodation (section 11), and vehicle safety (section 12.10).

7.1.3 For businesses that employ or contract security guards, provide training and direction to the guards to help ensure that they treat workers and community members fairly and appropriately and do not use excessive force as part of their duties.

7.1.4 Businesses will develop a Worker Code of Conduct which shall provide the following:

- Direct business workers on appropriate behaviours to help avoid negative interactions with local communities and promote a positive working environment.
- Prohibit physical violence, discrimination, harassment, bullying, violence, and promote equal opportunity;
- Require all business staff to adhere to safety measures;
- Prohibit working under the influence of alcohol and prohibited drugs;
- Prohibit intimidation, offensive language and behaviour, prostitution, or sexual harassment when on Project sites or in local communities.
- Detail a mechanism for safe reporting of violations of these prohibitions and ensure investigation of any reported incidents.

- Ensure, if proven, serious actions are taken up to and including dismissal of the worker and referral of cases to the police when there is evidence of criminal acts.

The Worker Code of Conduct will be provided to all business workers before they sign their contract of employment, and the contract of employment must state that the business worker agrees to abide by the Worker Code of Conduct. In cases of low literacy, business workers must also be provided with a verbal explanation of the Worker Code of Conduct.

7.1.5 Businesses shall apply good practice measures to minimise the creation of any area of standing water (e.g. empty drums) that provide habitat for mosquitos.

7.1.6 Businesses shall provide new workers with advice on required vaccinations and precautions for malaria and other diseases, particularly for non-local workers.

7.1.7 Occurrences of malaria amongst business workers must be recorded with any notable increases investigated and adaptive management measures identified and put in place with the aim to introduce additional measures to reduce transmission risk.

7.1.8 Worker induction, and training and awareness campaigns provided by individual businesses must include Sexually Transmitted Disease and HIV/AIDS. Condoms must be made available for all workers within the GDIZ. The use of sex workers will be prohibited and stated in the Project Worker Code of Conduct.

7.1.9 Individual businesses must implement a training plan for drivers of vehicles which they operate and manage to educate them on the specific areas along the RNIE2 where key community services and infrastructure is and where potential vulnerable groups may be more widely present. This should present the drivers with the hazards present in these areas, alongside mandating slower speed limits at peak times e.g., around the hours at which schools open and close.

7.1.10 Individual businesses must have in place a code of conduct for its staff that aligns with the requirements of the Benin Labour Code. In the

event of any grievances relating to conflict or disputes between workers and the local community, All businesses must report this immediately to SIPI for resolution.

8. HAZARDOUS MATERIALS

The following guidance is applicable to those businesses that will use, store, or handle any quantity of hazardous materials (Hazmats). Hazardous materials are defined as any material that represents a risk to human health, property, or the environment due to their physical and chemical characteristics. Hazardous materials can be classified as: explosives; compressed gases, including toxic or flammable gases; flammable liquids; flammable solids; oxidizing substances; toxic materials; radioactive material; and corrosive substances.

In the instance where a hazardous material becomes unusable to the business and is to be disposed of, however maintains its hazardous properties, it is classified as a hazardous waste. Guidance on hazardous waste is presented in Section 5.5.

8.1 General Hazardous Materials

8.1.1 All businesses are to develop a Hazardous Materials Management Plan (HMMP) which outlines management actions to be undertaken commensurate with the potential risks of their activities as it relates to the production, handling, storage and use of hazardous materials. The following sections outline preventions measures which should be outlined as applicable within the HMMP.

8.1.2 The business is to review and make a record of the types and amounts of hazardous materials present. This is to be included in the HMMP as a summary table which presents the following information about each hazardous material:

- Name and description;
- Classification;
- Internationally accepted regulatory reporting threshold quantity or national equivalent (e.g., EPA);
- Quantity used per month; and
- Characteristics that make the material hazardous.

8.1.3 Any vessel which will be used for primary storage and piping must be checked for long-term material compatibility with the hazardous material that it will carry.

8.1.4 Prevention Measures

Hazardous Materials Transfers

The manual and mechanical transfer of materials can result in the uncontrolled release of hazardous materials. To prevent these businesses should:

- Use dedicated fittings, pipes and hoses specific to the material within the tanks e.g., all acids use one type of connection, all caustics use another), and maintaining procedures to prevent addition of hazardous materials to incorrect tanks.
- Use transfer equipment that is suitable (designed to ensure safe transfer) to the material being transferred.
- Regularly inspect, maintain, and repair fittings, pipes and hoses.
- Implement secondary containment e.g., drip trays, at any point of possible overflow e.g., connection points.
- The handling of hazardous materials must be carried out by persons with appropriate training.

Overfill Protection

- To prevent overfill from vessels or tanks it is recommended that the business installs an automatic overfill protection system (float valve), however manual overfill protection systems are to be used.
- Install a gauge on to tanks to measure volume.
- Utilise dripless hose connections for connections with storage tanks.
- Collect spills around the fill pipe by using a catch basin.
- Pump less volume than the available volume within the tank or vessel.
- Provision of overfill or over pressure vents that allow controlled release to a capture point.

Reaction, Fire, and Explosion Prevention

In order to manage uncontrolled reactions or conditions, of reactive, flammable and explosive materials, subsequently resulting in fire or explosion, businesses should:

- Store incompatible materials in separate areas.
- Separate material storage areas with containment facilities.
- If materials are deemed extremely hazardous or reactive utilise material-specific storage.
- Install tank farms, transfer stations and other equipment that handles flammable material with grounding and lightning protection.
- Avoid reusing tanks for different products without checking material compatibility.
- Store hazardous materials in a separate area of the business to the main production works. Where proximity is unavoidable utilise physical separation with structures designed to prevent fire, explosion, spill, and other emergency situations from affecting facility operations.
- Prohibit/control sources of ignition in areas where a risk of explosion may be present (e.g. presence of flammable vapours or combustible dusts).

8.1.5 Where a risk of explosion (through flammable vapours/ combustible dusts) is present, suitable control measures must be implemented to control this risk.

Secondary Containment (Liquids)

Secondary containment should be utilised to the maximum extent to prevent the accidental release of liquid hazardous materials during storage or transfer, and include berms, dikes, and walls.

Secondary containment structures must be made of impervious and chemically resistant materials.

Secondary containment design should also consider means to prevent contact between incompatible materials in the event of a release.

Areas in which hazardous material are stored, transferred, or utilised should have impervious flooring that is sloped towards a collection point which is a closed system i.e., not connected to the municipal wastewater/stormwater drainage system.

When the above point is not practical and dedicated containment structures cannot be provided, alternative spill containment should be utilised, this includes the use of one or more of the following; portable drain covers (which can be deployed for the duration of the operations), automatic shut-off valves on storm water basins, or shut off valves in drainage or sewer facilities, combined with oil-water separators, or another recognised method of containment.

Drummed hazardous materials with a total volume of 1,000 litres or more should be stored in an area with impervious surfaces which are sloped or bermed to contain a minimum of 25% of the total storage volume.

Conduct daily or (maximum) weekly reconciliation of the contents of tanks, and inspect visible portions of tanks and piping for leaks.

Use double-walled, composite, or specially coated storage and piping systems, particularly when using underground storage tanks (USTs) and underground piping. If double-walled system is used then a way of detecting a leak between the two walls must be provided.

Storage Tank and Piping Leak Detection

In locations where the release of a product from a storage system could result in the contamination of drinking water sources leak detection should be used in conjunction with secondary containment.

Where secondary containment is not feasible, leak detection should be implemented and utilised.

Acceptable leak detection methods include:

- Use of automatic pressure loss detectors on pressurized or long-distance piping;
- Use of approved or certified integrity testing methods on piping or tank systems, at regular intervals; and
- Considering the use of SCADA44 if financially feasible.

Underground Storage Tanks (USTs)

Underground storage should be avoided when storing highly soluble organic materials.

Use cathodic protection (or equivalent rust protection) for steel tanks.

When installing new USTs, install impermeable liners or structures under and around the tanks and lines that direct leaked product to monitoring ports at the lowest point of liners or structures.

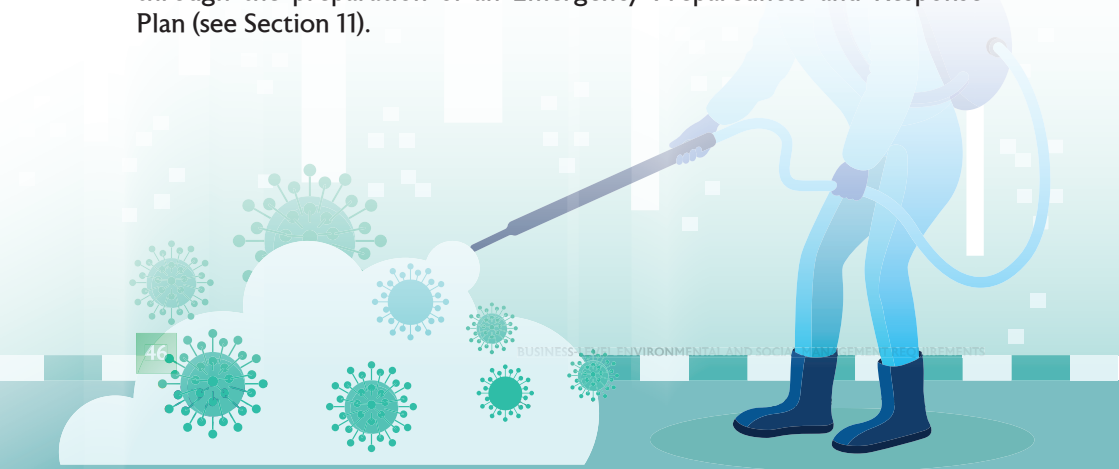
Reconciling tank contents by measuring the volume in store with the expected volume, given the stored quantity at last stocking, and deliveries to and withdrawals from the store.

Regularly monitor USTs to check:

- The surface above tanks for soil movement; and
- Test integrity by volumetric, vacuum, acoustic, tracers, or other mean.

8.2 Management of Major Hazards

It is not expected that any business will be handling or storing hazardous materials that are at or above threshold quantities. A threshold quantity is a specified amount of a regulated substance that if released could cause serious danger to the health of the environment or/and humans as a result of exposure of 1 hour or less. Each individual business is required to evaluate its hazardous material requirements and if considered to be at or above threshold quantities then extra management and preventative measures are to be considered in order to prevent accidents such as fire, explosions, leaks or spills, and to prepare and respond to emergencies through the preparation of an Emergency Preparedness and Response Plan (see Section 11).



9. NOISE

The guidance below is applicable to those businesses that produce noise for which impact stretches beyond the facility.

9.1 Prevention and Control Measures

Noise prevention and control measures are to be put in place by businesses when the predicted or measured impacts from noise of a facility and its operations exceed the industrial noise levels of 70 db (or 50 db for commercial businesses) presented in Table 9 1 National and International Noise Level Guidelines within the boundary of their site . Following sections outline measures to manage noise impacts in the cases where noise levels exceed those in Table 9 1.

Table 9 1 National and International Noise Level Guidelines at Sensitive Receptors

	One Hour LAeq (dBA)							
	06:00-13:00		13:00-15:00		15:00-22:00		22:00-06:00	
Guideline	National	IFC	National	IFC	National	IFC	National	IFC
Receptor								
Residential; institutional; educational	**50**	**45** (6:00 - 7:00) 55 (7:00 – 13:00)	**45**	55	**50**	55	**45**	**45**
Commercial	**55**	70	**50**	70	**55**	70	**50**	70
Industrial	**70**	**70**	**70**	**70**	**70**	**70**	**70**	**70**
To meet international standards businesses should be in compliance with the most stringent industrial values shown in **red** above and should ensure that background noise levels within their site boundary do not exceed an increase in 3 dB.								

9.1.1 Priority is to be given to reducing impacts at the source through reduction options such as:

- Selecting equipment with lower sound power levels;
- Installing silencers for fans;
- Installing suitable mufflers on engine exhausts and compressor components;

- Installing acoustic enclosures for equipment casing radiating noise;
- Improving the acoustic performance of constructed buildings, applying sound insulation;
- Installing acoustic barriers without gaps and with a continuous minimum surface density of 10 kg/m2 in order to minimize the transmission of sound through the barrier;
- Barriers should be located as close to the source or to the receptor location to be effective;
- Installing vibration isolation for mechanical equipment;
- Limiting the hours of operation for specific pieces of equipment or operations, especially mobile sources operating through community areas; and
- Developing a mechanism to record and respond to complaints.
- A Traffic Management Plan is to be developed by each business which should include provisions for ensuring that their vehicle fleet is maintained on a regular basis to ensure road worthiness. To the extent possible aged vehicles should be replaced with more modern equivalents that include lower emissions and quieter engines.

10. LABOUR MANAGEMENT

Businesses must put in place the necessary safeguards to protect worker welfare and rights, including all requirements of national law and the minimum requirements stated in the following sections. Businesses should seek to continuously develop these safeguards so as to align with the good international industry practices.

10.2 Terms and Conditions of Employment

10.2.1 Provide all workers with a written contract of employment that is in a language they understand and clearly describes the terms of their employment, to include: the name of their employer, the place of work, their job title and key activities, their start date, duration of employment (if fixed term), the wage level, deductions from pay, how and when pay slips and payments are issued, hours of work, overtime policy, rest days, breaks, grievance procedures, notice periods, termination procedures, disciplinary procedures, and, if applicable, information on collective bargaining and any other benefits such as health insurance and pension.

10.2.2 The terms of the contract must be in line with the national Labour Code and Law 2017-05, including in relation to any fixed durations of the contract, trial periods, paid leave, sick leave, maternity leave, deductions from pay, termination, notice periods, and apprenticeships.

10.2.3 Any collective agreements that have been made in line with the national Labour Code must be respected and applied for those workers that are covered under the agreement.

10.2.4 Communicate the contract of employment to workers verbally to help ensure that all workers understand the terms of their employment.

10.2.5 Workers must be paid regularly and on time, in line with the terms of the contract. As per the Labour Code, for those paid on a monthly basis, payments must be made as per Labour Code and Regulation. Records must be kept of hours worked and payments made to workers. Payslips must be issued to workers to state the payments they have received. At the end of employment, all outstanding wages and other benefits must be paid in a timely manner.

10.2.6 Maximum working hours (both standard and overtime) and rates for overtime payments are defined in the Labour Code, and must be respected for all workers. As per the Labour Code, except under certain conditions that are stated in the Labour Code, working overtime may not have the effect of increasing the effective working time to more than sixty hours per week, and not more than twelve hours per day.

10.2.7 Adequate rest must be provided to all workers to help protect their welfare and health. Typically, this will be at least 12 hours rest between shifts and a minimum of twenty-four consecutive hours of rest per week.

10.2.8 Wages must be set at a level in line with the requirements of the Labour Code, including adherence to the national minimum wage.

10.2.9 Information that is collected about workers must be limited to that directly relevant to their employment, and workers must be informed about and give consent to such information being collected and the way that it will be used. Medical data should remain confidential.

10.3 Non-Discrimination and Equal Opportunity

10.3.1 The business must apply and communicate to workers a policy of non-discrimination and equal opportunity, meaning that no workers will be treated differently in relation to recruitment, hiring, firing, working conditions, or terms of employment on the basis of personal characteristics that are unrelated to the requirements of the job. Such personal characteristics include race, colour, gender, sexual orientation, religion, political or other opinion, national extraction, descent, ethnic or social origin, language, HIV status, marital status, union membership, or disability.

10.3.2 GDIZ encourages local recruitment from the communities surrounding the GDIZ site. Businesses must take steps to advertise employment opportunities in local communities, and ensure that local residents are able to submit employment applications to the business.

10.3.3 If the business employs migrant workers (i.e. from outside Benin) then they should not be given worse pay and conditions compared to local workers.

10.4 Child labour

10.4.1 The business must not employ people under the age of 18 in any form of work that is hazardous or could be harmful to the child, including work with dangerous machinery, work in workplaces with potentially harmful levels of noise, vibration, heat or exposure to substances, work in dangerous situations (e.g. work at height), or work with long hours. The definition of hazardous work that is prohibited for children must also include the work as defined in national law 2011-029 of January 2011 on hazardous activities.

10.4.2 As per the Labour Code, and unless subject to a derogation, night work is prohibited for workers under the age of 18.

10.4.3 Children under the age of 18 can only be employed in line with the prevailing national law on minimum working age. If the business employs persons under the age of 18, the business must undertake a risk assessment to ensure the work is appropriate, must limit working hours to an appropriate level, and must regularly monitor the health, working conditions, and hours of work of the employee.

10.5 Forced labour

10.5.1 The business must not employ any worker who is coerced or controlled in any other way to provide labour other than in a voluntary manner. The following practices that can create forced labour conditions are prohibited:

- Charging workers any fee as part of the recruitment process, either directly by the business or by agencies acting on behalf of the business to source labour;
- Retention of worker passports or ID cards by the business, other than with the explicit consent of the worker and when a system is in place to return the document immediately on request;
- Retention of wages or delays in payment beyond the contracted terms;
- Providing worker with loans that would be difficult to pay off during the typical period of employment;
- Using excessive notice periods such that the worker cannot leave employment when they wish;

- Imposing substantial or inappropriate fines that are deducted from wages; and
- Charging excessive amounts for travel, housing and meals that create unpayable debt obligations to the business.

10.5.2 If the business uses a recruitment agency or other third party for their workers the business must require that they do not employ any of the prohibited practices stated above, by:

- Including these prohibited practices in the contract with the agency; and
- Interviewing workers provided by the agency to verify that no such practices have occurred.

10.6 Worker representation

10.6.1 The business must respect workers' rights to elect worker representatives, to form and to join workers' organizations of their choosing, and to bargain collectively.

10.6.2 If there is collective bargaining in the workplace then the business must respect the agreements established by such collective bargaining. The provisions of the Labour Code on trade unions and worker representation must be adhered to.

10.7 Grievance Mechanism

10.7.1 The business must provide a grievance mechanism (GM) for workers to raise issues and complaints. The GM must be explained to workers when they are hired and then reminders must be given during their employment, such as in the form of posters displayed in the workplace. The GM must allow workers to raise issues and complaints anonymously, if they wish. The GM will typically be implemented by having a Grievance Box in which workers can post written issues and complaints, as well as the option to report issues and complaints verbally. The business must investigate and resolve grievances in a timely manner, and keep a record of all of the grievances received and the ways in which they were resolved.

10.7.2 Use of the GM as a method for resolution must not restrict the rights of the worker to pursue other forms of remedy, including pursuing complaints through the Labour Inspector or the labour courts, as defined in the Labour Code.

10.8 Collective dismissals

10.8.1 The business must only undertake collective dismissals (or 'retrenchment') after they have carried out an analysis of alternatives, and only then if there are no viable alternatives.

10.8.2 Prior to implementing collective dismissals the business must develop and implement a retrenchment plan to reduce the adverse impacts on workers. Consultation must be undertaken with workers and their organisations on the retrenchment plan, and it must be implemented based on the principal of non-discrimination.

10.8.3 Collective dismissals must be planned and undertaken in line with the requirements of the national Labour Code, including requirements for notification.

11. WORKER ACCOMMODATION

11.1 General requirements

11.1.1 Workers must not be forced to use any of the accommodation services provided by the business, and if the business charges for accommodation the prices charged must not be above market rate and must be transparent and fair.

11.1.2 The accommodation services must be provided in a manner consistent with the principles of non-discrimination and equal opportunity, e.g. services must not be denied on a discriminatory basis.

11.1.3 All accommodation provided by the business must be safe and secure, adhere to national and local regulation, and have any necessary permits and certificates in place before they are occupied.

11.2 Design measures

11.2.1 Fire safety systems must be implemented as appropriate: fire extinguishers, fire alarms, protected escape routes, number and size of staircases and emergency exits, and restrictions on the use of certain building materials.

11.2.2 Electricity, plumbing, water and sanitation services must be designed and inspected for compliance with national design and construction regulations, and be safe for use.

11.2.3 Adequate ventilation and/or air conditioning systems and lighting must be provided.

11.2.4 Collective social and rest spaces must be available.

11.2.5 All doors and windows should be lockable and provided with mosquito screens where conditions warrant.

11.3 Room and washing standards

11.3.1 Rooms must be designed and managed so that are not over-crowded, with 8 workers per room being a typical maximum.

11.3.2 Separate sleeping areas must be provided for men and women.

11.3.3 Each resident must get at least 4 square metres of space, a minimum ceiling height of 2.10 metres, their own bed with a minimum space between beds of 1 metre, adequate bedding, furniture including a lockable cupboard, partitions or curtains for privacy, and storage space for work boots and other personal protection equipment.

11.3.4 Triple deck bunk beds are prohibited. Use of double deck bunk beds should be minimised.

11.3.5 There must be at least one of each of the following units for every 15 persons: toilet, urinal, handwash unit, and shower/bath unit.

11.3.6 Sanitary and toilet facilities must have lockable doors and be conveniently located and easily accessible from rooms/dormitories.

11.3.7 Worker residents must be able to access facilities to wash and dry work and non-work-related clothes, or alternatively a free laundry service can be provided.

11.4 Worker health

11.4.1 An adequate and convenient supply of free potable water must be available to workers.

11.4.2 Waste systems must be in place so that wastewater, sewage, food and any other waste materials are adequately managed.

11.4.3 First aid kits adequate to the number of worker residents must be available, and residents must be informed of where emergency and other medical services can be received.

11.4.4 Worker residents must have access to trained first aiders, by having an adequate number of worker residents trained to provide first aid or, if located close to external medical services, there must be immediate access to such services.

11.5 Management of accommodation

11.5.1 An appointed person with the adequate background and experience must be designated to be in charge of managing the accommodation.

11.5.2 Rooms/dormitories, sanitary and kitchen/canteen facilities must be kept in good condition, being aired and cleaned at regular intervals.

11.5.3 If worker residents can cook their own meals, kitchen space must be provided separate from sleeping areas and be safe and hygienic. If canteens are provided then they must provide a reasonable amount of space per worker, with tables, benches, individual drinking cups and plates.

11.5.4 Emergency plans must be prepared and communicated to worker residents.

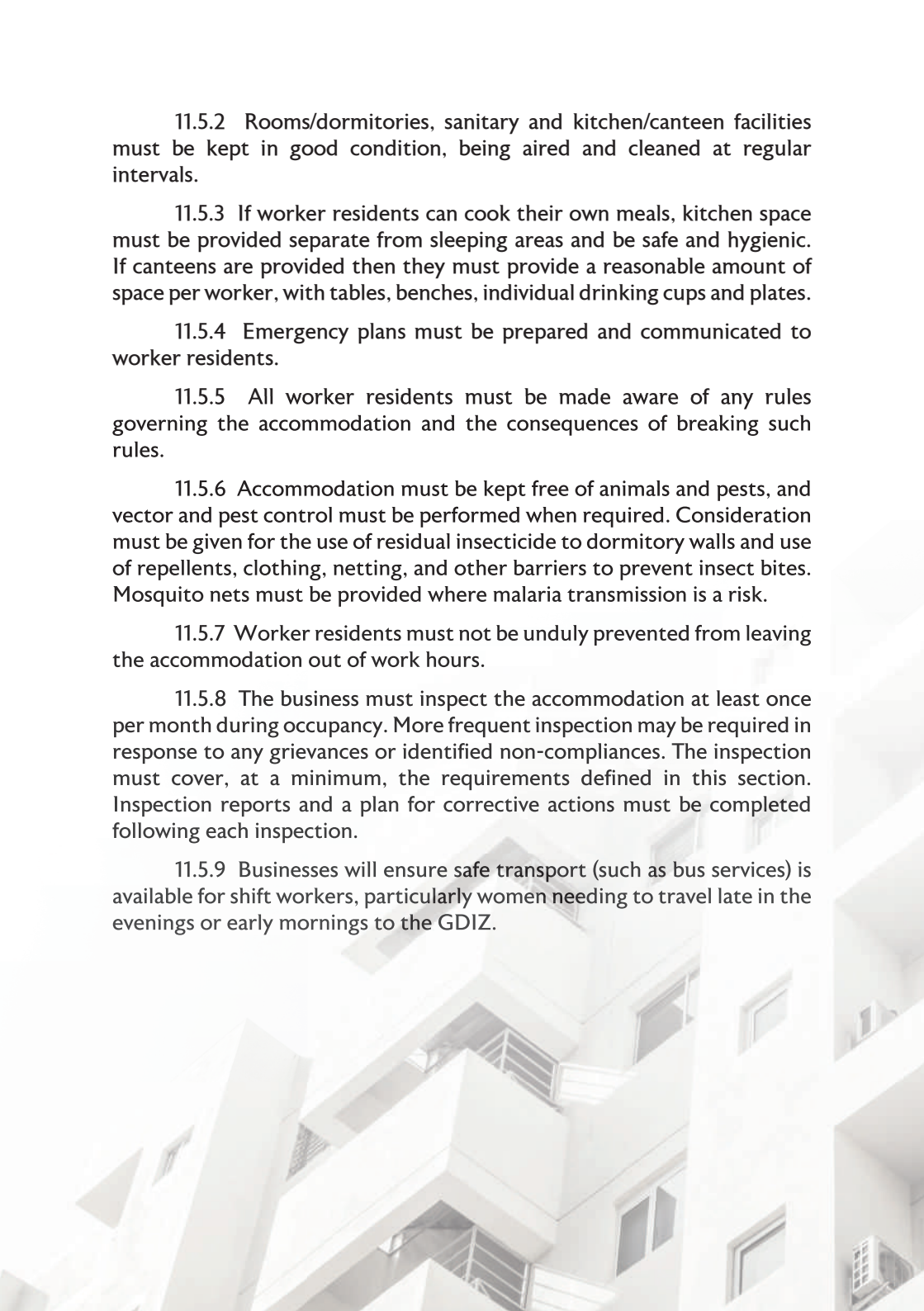
11.5.5 All worker residents must be made aware of any rules governing the accommodation and the consequences of breaking such rules.

11.5.6 Accommodation must be kept free of animals and pests, and vector and pest control must be performed when required. Consideration must be given for the use of residual insecticide to dormitory walls and use of repellents, clothing, netting, and other barriers to prevent insect bites. Mosquito nets must be provided where malaria transmission is a risk.

11.5.7 Worker residents must not be unduly prevented from leaving the accommodation out of work hours.

11.5.8 The business must inspect the accommodation at least once per month during occupancy. More frequent inspection may be required in response to any grievances or identified non-compliances. The inspection must cover, at a minimum, the requirements defined in this section. Inspection reports and a plan for corrective actions must be completed following each inspection.

11.5.9 Businesses will ensure safe transport (such as bus services) is available for shift workers, particularly women needing to travel late in the evenings or early mornings to the GDIZ.



12. OCCUPATIONAL HEALTH AND SAFETY

12.1 Responsibility to workers

12.1.1 Businesses must take all reasonable measures to identify risks to worker OHS and take all reasonable precautions to protect workers from those risks.

12.1.2 Businesses must fully adhere to the prevailing requirements of Benin law on Occupational Health and Safety (OHS). Prevailing law on OHS may include but not be limited to:

- The Labour Code.
- Decree 2006-775 on general safety rules.
- Order 22/MFPTRA/DC/SGM/DT/SST on general occupational health and safety measures.
- Order 126/MFPTRA/DC/SGM/DGT/DST regulating noise in the workplace.
- Decree 2011-029 on hazardous activities.

12.2 Design measures

The businesses work site / premises must be designed to reduce safety risk to as low as reasonably practical for workers and visitors. Design measures that should be considered as a minimum are:

- Buildings must be structurally safe.
- Lighting must be adequate for the activities undertaken. Work spaces must be equipped with lighting to a level that supports OHS, in line with the requirements of national law Order 022/ MFPTRA/DC/SGM/DT/SST.
- Hazardous and noise-producing equipment should be positioned within the premises with an objective of minimising risk to workers.
- Surfaces and equipment must be designed and positioned so as to be easy to clean and maintain.

- Inclusion of fire resistant materials, fire detectors, alarm systems, and fire-fighting equipment. Fire safety equipment must be appropriately maintained.
- Floors must be level, even, and non-skid.
- Use of handrails on platforms, ladders, and stairs
- Prevention of unauthorized access to areas with potential hazards, and segregation of people and equipment and vehicles within and outside the premises.
- Use of safe and maintained electrical systems, including use of grounding.

12.3 OHS Management System

12.3.1 Every business must develop and implement an OHS Management System. The core components of this system must include:

- Having a designated Health and Safety Manager who is competent to identify, manage and monitor OHS risks (see also 2.2.1).
- Having and displaying in the work site / premises an OHS Policy that defines the people in the business who have responsibilities for OHS management.
- Conduct an overall Risk Assessment to identify risks that exist in the workplace and the mitigation measures and responsible parties for each risk. Risks must be assessed with consideration of the likelihood and severity of the consequence associated with the risk. The identification of risks must be done by a competent person and must draw on guidance and standards, including those listed in Appendix A.
- Develop a Job Hazard Analysis (JHA) for each identified hazardous activity, identifying the hazards and required mitigation measures to address those hazards. JHAs must be communicated to all workers that undertake the activity or are involved in any mitigation or controls.
- Standard Operating Procedures must be developed for all core activities and communicated to all involved in those activities.

- Use a Permit to Work system for all hazardous activities that require additional controls and monitoring. This would include hot works such as soldering and welding, working at height, working in confined spaces, work with live electricity, and excavations.
- 'Lock Out and Tag Out' procedures should be used for equipment with exposed or guarded moving parts, or in which energy can be stored (e.g. compressed air, electrical) during servicing or maintenance.
- For production systems, develop and implement a process safety program that identifies and addresses the risks arising from the production process, including risks arising from hazardous materials, chemical reactions, equipment, and malfunctions.

12.3.2 Every business must establish a Health and Safety Committee, with worker and management representation as defined in the Labour Code. The role of the Health and Safety Committee must be as defined in the Labour Code, to include establishing measures to improve OHS conditions, disseminating OHS information to workers, promoting a safety culture amongst workers, carrying out investigations into accidents, and help to identify OHS risks and hazards and the required controls. The Health and Safety Committee must meet at least once per quarter and after each occurrence of an occupational accident or disease.

12.3.3 The approach to managing workplace noise, vibrations, air pollutants, physical hazards, hazardous materials and fire risk must address the minimum requirements as stated in national law, including Order 022/MFPTRA/DC/SGM/DT/SST and Order 126/MFPTRA/DC/SGM/DGT/DST.

12.3.4 For premises and work sites in which dusts, vapours and gases are a potential hazard, a Workplace Air Quality Plan must be developed to outline how physical controls (including exhaust gas collection, extraction and ventilation systems), substitution to less hazardous materials and processes, PPE, and workplace air quality monitoring will be applied. The objective of the plan must be to reduce worker exposure to as low as reasonably practicable and at a minimum achieves the levels recommended by the American Conference of Governmental Industrial Hygienists Threshold Limit Values or alternate recognised exposure guidelines. It must also identify and address explosion risks from sources and accumulations of gases and dusts.

12.4 Hazard Study

12.4.1 Each business that has storage silos, processes with explosion or combustion hazards, or presents other significant hazards for workers and surrounding businesses or residences, must conduct a Hazard Study. This Hazard Study must include a risk assessment / hazard identification, consideration of accident scenarios, consequences analysis, identification of domino effects, and the definition of appropriate safety measures. For businesses with hazards that could create impacts outside their site, a detailed risk assessment must be carried out, to include bow-tie analysis (integrating fault tree and event tree), and be used for determining the probability of each residual hazard.

12.5 First aid and medical support

12.5.1 Every business must arrange for an occupational health service to be provided by qualified occupational health practitioners, in line with the requirements of the Labour Code. This service must be used to monitor OHS conditions and worker health, and provide medical support where required. In addition, any business employing at least 100 employees must provide a social support service for the benefit of the workers by providing a social advisor, in line with the requirements of the Labour Code.

12.5.2 In line with the Labour Code, all workers must be given a medical examination on hiring, and then annually. A medical examination must also be provided after a worker returns to work after a long absence due to disease, health condition, or injury.

12.5.3 Every work site must have at least one available, trained first-aider. In line with the Labour Code, in each work site where there are more than 25 people, at least two or three workers must be trained to provide first aid.

12.5.4 Each work site must have a first-aid kit that is equipped based on the potential injuries that could occur to workers based on the hazards identified at each site.

12.5.5 Where emergency response could require immediate flushing with water, eye-wash stations and/or emergency showers must be provided close to workstations where such hazards are present.

12.5.6 All work sites must have the equipment available and plans

in place to transport any injured or ill workers to an appropriate medical facility.

12.6 Noise exposure for workers

12.6.1 Businesses must minimise worker exposure to noise. No worker shall be exposed to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection. In addition, no unprotected ear shall be exposed to a peak sound pressure level (instantaneous) of more than 140 dB(C).

12.6.2 Prior to the issuance of hearing protective devices as the final control mechanism, use of acoustic insulating materials, isolation of the noise source, and other engineering controls must be investigated and implemented, where feasible

12.6.3 The use of hearing protection must be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110dB(A). Hearing protective devices provided must be capable of reducing sound levels at the ear to at least 85 dB(A), or lower.

12.6.4 Periodic medical hearing checks must be performed on workers exposed to high noise levels.

12.7 OHS monitoring and reporting

12.7.1 All OHS control and mitigation measures must be inspected and tested on a regular basis, with records kept to confirm completion.

12.7.2 Regular inspection must be undertaken to verify that control measures are being used appropriately, and that PPE is being worn and is effective.

12.7.3 Records of OHS training completion must be kept and monitored to ensure all workers complete training as and when required.

12.7.4 Workers must not face any disciplinary measures or negative consequences for reporting or raising concerns about OHS.

12.7.5 Each business must have a system for reporting and recording occupational accidents and diseases, as well as near misses and other incidents that could have led to injury.

12.7.6 Near misses and incidents must be investigated by the business, with investigations recorded and corrective actions communicated to workers.

12.7.7 In line with the Labour Code, all occupational accidents and illnesses must be reported to the Labour Inspector and Social Security Fund, within 48 hours of occurrence.

12.8 OHS facilities

12.8.1 Potable drinking water must be made available free of charge at all work sites.

12.8.2 Clean toilet facilities must be provided either within or close to the place of work, with separate facilities for men and women. The number of toilets must be provided in line with the requirements of national law Order 022/MFPTRA/DC/SGM/DT/SST.

12.8.3 Areas for rest (including sleeping), food preparation and eating must be clean and located in a safe position away from potentially hazardous activities or materials and from smoke, dust and chemicals.

12.8.4 All equipment must be regularly inspected and maintained as per manufacturers' specification, only used for its intended purpose, and safety controls that are present of that are required for the equipment must be applied.

12.9 Personal Protective Equipment

12.9.1 Personal Protective Equipment (PPE) must be provided free of charge to workers, with the provided PPE being based on the requirements identified in the Job Hazard Analysis, and at a minimum be in line with the requirements of national law Order 022/MFPTRA/DC/SGM/DT/SST.

Businesses must consider, but not be limited to, the types of PPE as indicated in the table below:

Objective	Workplace Hazards	Suggested PPE
Eye and face protection	Flying particles, molten metal, liquid chemicals, gases or vapours, light radiation.	Safety Glasses with side-shields, protective shades, etc.
Head protection	Falling objects, inadequate height clearance, and overhead power cords.	Plastic Helmets with top and side impact protection.
Hearing protection	Noise, ultra-sound.	Hearing protectors (ear plugs or ear muffs).
Foot protection	Falling or rolling objects, pointed objects. Corrosive or hot liquids.	Safety shoes and boots for protection against moving and falling objects, liquids and chemicals.
Hand protection	Hazardous materials, cuts or lacerations, vibrations, extreme temperatures.	Gloves made of rubber or synthetic materials (Neoprene), leather, steel, insulating materials, etc.
Respiratory protection	Dust, fogs, fumes, mists, gases, smokes, vapours	Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapours and gases). Single or multi-gas personal monitors, if available.
	Oxygen deficiency	Portable or supplied air (fixed lines). On-site rescue equipment.
Body/leg protection	Extreme temperatures, hazardous materials, biological agents, cutting and laceration.	Insulating clothing, body suits, aprons etc. of appropriate materials.

Source *: IFC EHS General Guidelines (2007)*

12.9.2 Businesses must apply a policy of zero tolerance for non-compliance by workers of the use of PPE that has been provided to them.

12.10 Vehicle Safety

12.10.1 Businesses must design and manage areas in which vehicles operate with the objective to minimise risks to workers and pedestrians. This may include use of defined loading and parking bays, use of signage, speed limits on site, and one-way routes. Businesses must define any types of vehicles that are prohibited from all or parts of their site, e.g. fuel tankers.

12.10.2 All vehicle operators must be trained and be licenced where required.

12.10.3 Hi-visibility clothing must be worn by workers when in proximity to moving vehicles and machinery.

12.10.4 Vehicles must be maintained and only operated according to manufacturer specifications, including in relation to maximum loads.

12.10.5 Loads must be secured and covered when necessary to prevent loss of cargo and generation of dust.

12.10.6 Drivers must not be permitted to drive for excessive hours that could lead to fatigue and distraction.

12.10.7 Loading and unloading of vehicles creates hazards to workers that must be assessed as part of a JHA. Control measures that may be required include ensuring that the area used is appropriate (e.g., away from slopes that create tipping risks) and using signallers or 'spotters' to help manage the process.

12.11 Training

12.11.1 Workers must be provided with a safety induction to the work site. This must include information on the hazards and control measures present at the site, requirements for use of PPE, and emergency response procedures.

12.11.2 Workers must also be given specific training for the equipment that they will be using and the activities that they will be undertaking. Records of training completion must be kept. Regular refresher training must be provided to ensure worker awareness and competency is maintained.

12.11.3 A site safety briefing must be given to visitors to the work site.

12.12 Other OHS measures

12.12.1 Good housekeeping must be applied within the premises to keep the work area free from trip, slip and other hazards.

12.12.2 Where applicable to reduce risk to workers, equipment must be installed with guards and emergency cut-off systems.

12.12.3 Controls must be applied to prevent unauthorised access to areas of the work site where hazards could be present. Options include

fencing, signage, and removing hazards in situations where access cannot be controlled.

12.12.4 Signage must be applied to warn and remind workers of specific hazards, activities that may be prohibited (e.g. smoking), requirements for PPE use, and directions to first aid equipment, fire extinguishers and emergency evacuation routes.

12.12.5 All potentially hazardous chemicals and machinery must be labelled as to the contents and hazards that are applicable.

12.12.6 Workers must be trained in techniques for safe lifting and handling of materials and equipment.

12.12.7 Injury risks related to repetitive tasks must be identified and mitigated through use of equipment, use of breaks and variety of tasks, or other controls as required.

12.12.8 Prevent the creation of mosquito habitat by preventing the pooling of water on the work site. Attention must be paid to the creation of water pools during construction phase earthworks and from wheel ruts along access roads. Containers, materials and equipment that can collect rainwater should also be moved to avoid pooling of water.

12.12.9 Any potential for radiation exposure (e.g. from X-ray stations used for continuous monitoring) must be assessed and controls and monitoring put in place in line with good international industry practice.

12.12.10 Ensure adequate control of worker's exposure to heat and cold. This may include use of insulation, guards, screens, reducing exposure times, PPE, and other means of avoiding exposure to extreme temperatures,

12.12.11 When natural fibre dust is present, implement the following to help prevent and control hazards:

- Installation of dust extraction, recycling and ventilation systems to remove dust from work areas, especially in cotton mills.
- Use of vacuum cleaning of surfaces instead of compressed air "sweeping" techniques.
- Implementation of regular housekeeping procedures.
- Use of mechanical methods to handle cotton and cotton waste.

12.12.12 The use of asbestos fibre is prohibited.

12.12.13 Minimise exposure and other risks from VOCs, including through:

- Choice of equipment, including use of hoods and enclosed equipment, and installation of extraction and air recycling systems to remove VOCs from the work area (see also section 3.3).
- Use of well-ventilated rooms and PPE such as respirators.
- Shift and task rotation for workers to minimize exposure.
- In areas of VOC use, electrical equipment should be rated for ignition prevention.

12.12.14 Minimise explosion risk by applying measures to prevent the accumulation of dusts (including organic and polymeric dusts), and remove possible sources of ignition where dusts may form clouds or accumulate.

12.12.15 Hazards arising from the use of ammonia and other refrigerants in refrigeration systems must be assessed for risks related to toxicity and creation of explosions.

13. EMERGENCY PREPAREDNESS AND RESPONSE

13.1.1 Each business must identify the measures that are required to prepare for and respond to emergencies, including defining and communicating to workers the evacuation process and the location of muster points. Larger businesses and those with high risk or complex response requirements are required to document these measures in an Emergency Preparedness and Response Plan.

13.1.2 Emergency exercises, including fire drills, must be undertaken periodically (at least once a semester) and be documented.

13.1.3 Businesses must have fire exits and ensure that they are not locked or blocked. The location of fire exits must be communicated to workers and visitors through signage and site safety briefings.

13.1.4 Smoke detectors and fire extinguisher equipment must be in place, frequently checked, and maintained in accordance with manufacturer specifications and the law.

13.1.5 Manual firefighting equipment must be easily accessible and simple to use. Sprinkler systems should be considered.

13.1.6 The locations and specifications of hazardous materials and situations that may present a risk to emergency response personnel must be notified to GDIZ and public emergency response providers.

14. SUPPLY CHAIN

14.1.1 The business has a responsibility for helping ensure that the workers of its primary suppliers are not at risk of child labour, forced labour or poor occupational health and safety practices. The measures defined in sections 14.1.2 to 14.1.4 must be put in place for the primary suppliers of the business, which are those suppliers that, on an ongoing basis, provide materials, components, goods or products that are essential for the core business processes of the business.

14.1.2 Contracts with primary suppliers must state that the supplier must not employ child labour or forced labour, and that they must put in place adequate occupational health and safety protection for its workers, addressing the requirements of national law as a minimum.

14.1.3 The business must identify whether the primary suppliers have known or potential risks of child labour, forced labour and poor OHS practices. Where these risks are identified they must conduct adequate due diligence and monitoring to ensure that they do not contribute to these risks through their procurement from primary suppliers. Due diligence and monitoring may include (i) requiring the primary supplier to provide evidence of their safeguards for these risks, such as their human resources policies or OHS documentation, (ii) site visits to make observations related to these risks, and (iii) requiring notification of OHS incidents and known / alleged cases of child or forced labour within the primary supplier business.

14.1.4 If the business identifies risks of child labour, forced labour or poor OHS practices within its primary suppliers it must take steps to require and / or help the primary supplier mitigate these risks. Alternatively, the business must take steps to change primary suppliers to those with lower risks.

14.1.5 Where a business is purchasing primary production (particularly food and fiber commodities) that is known to be produced in regions where there is a risk of significant conversion of natural habitat[7]

7 Natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition.

and/or critical habitat[8], systems and verification practices will be adopted as part of the businesses management system to evaluate its primary suppliers[9]. The systems and verification practices may include one or more of the following:

- Identify where the supply is coming from and habitat type of the area;
- Implement an ongoing review of the primary supply chain;
- limit procurement to those suppliers that can't demonstrate that they are not contributing to significant conversion of natural and/or critical habitats. (this may be demonstrated by delivery of certified product, or progress towards verification or certification under a credible scheme in certain commodities and/or locations);
- where possible, set actions to shift the primary supply chain over time to suppliers that can demonstrate that they are not significantly adversely impacting these areas
- Businesses shall develop a Traffic Management Plan based on their own operations, written in accordance with the overarching site wide Traffic and Road Safety Plan. The plan should include requirements to be followed by their primary supply chain with respect to transportation of goods, materials and workers..
- Businesses shall contractually require their primary supply chain to adhere to the requirements set out in the Social Inclusion Plan developed by SIPI, or in its absent the ILO Fundamental Conventions and Benin's Labour Code (1998), General Collective Labour Agreement (2005), and Social Security Code (2003). This includes in relation to no forced labour, child labour, gender-based violence and gender equality.

8 Critical habitats are areas with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered species; (ii) habitat of significant importance to endemic and/or restricted-range species; (iii) habitat supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems; and/or (v) areas associated with key evolutionary processes.

9 Primary suppliers are those suppliers who, on an ongoing basis, provide the majority of living natural resources, goods, and materials essential for the core business processes of the project.

- Businesses shall contractually require their primary supply chain to implement the businesses specific Traffic Management Plan
- Individual businesses shall undertake or commission an annual audit of their primary supply chain in relation to meeting the requirements of previous mitigation measure

15. BIODIVERSITY

The following section provides mitigation measures to manage the impact from businesses on biodiversity, namely the individuals in and habitat of Sacred Forest of Anavie.

15.1.1 All businesses must put in place a zero-tolerance policy for all employees in relation to hunting, poaching or illegal trafficking of wildlife.

15.1.2 All business must ensure no damage or disturbance to areas of vegetation and natural habitat, including the Sacred Forest of Anavie.

15.1.3 Individual businesses should implement the principles for best practice lighting design during their operation. These are as follows:

1. Start with natural darkness and only add light for specific purposes;
2. Use adaptive light controls e.g., dimmer, motion senser and timer, to manage light timing, intensity, and colour;
3. Light only the area intended (avoid light spill);
4. Use the lowest insensitivity appropriate for the task;
5. Use non-reflective dark coloured surfaces; and

Use light with little or no blue wavelengths

16. MONITORING, INSPECTION AND AUDIT

16.1.1 Businesses are responsible for conducting the environmental and social monitoring that is necessary to ensure the compliance of their activities with national law and the General Operational Guidelines.

16.1.2 Businesses must inform the Agence Béninoise pour l'Environnement (ABE) by formal letter of the commencement of construction and operations activity.

16.1.3 Businesses must prepare an environmental monitoring report for their activities and issue to ABE once per quarter, in line with Article 45 of Decree No. 2017-332.

16.1.4 Businesses that have applicable assets or activities must conduct and issue to ABE an internal environmental and social audit of their facilities each year, in line with Art. 81 of Decree 2017-332. Internal E&S audit reports must be submitted to ABE no later than 15th December of each year. Auditors must be those approved by ABE.

16.1.5 Businesses must allow inspection and audit to be conducted on their premises by GDIZ and ABE representatives, international lenders and by other government authorities at their convenience following a written request. Businesses must provide relevant information as requested by inspectors, subject to the provisions of national law.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