# ENVIRONMENTAL, SOCIAL, AND HEALTH AND SAFETY MANAGEMENT PLANS<sup>1</sup>

## **PARK OPERATION MANAGER**

PARC INDUSTRIEL DU CARACOL (PIC)

<sup>&</sup>lt;sup>1</sup> Plans will include procedures, organizational resources (including roles and responsibilities), monitoring (including key performance indicators) and reporting requirements

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## 1. LIST OF ACRONYMS

**BOD** Biochemical Oxygen Demand

**COD** Chemical oxygen demand

**CSIP** Corporate Social Investment/Social Investment Plan

IADB Inter-American Development Bank

**IFC** International Finance Corporation (Société Financière Internationale)

PIC Industrial Park of Caracol

PMP Park Management Plan

**SEP** Stakeholder Engagement Plan

**UN** United Nations

**TMP** Transport Management Plan

**VOCs** Volatile Organic Compounds

# ENVIRONMENTAL, SOCIAL, AND HEALTH AND SAFETY MANAGEMENT PLANS<sup>2</sup>

### PARC INDUSTRIEL DE CARACOL

### PARK OPERATION MANAGER

The PIC Environment, Social, Health and Safety (ESHS) Management System (MS) is a comprehensive system of policies, procedures, and industry standards that has been developed and implemented to manage ESHS hazards and risks related to the development of the PIC Project. Therefore, the ESHS MS covers all activities related to the management of the operation phase of the PIC project.

## 2. ENVIRONMENT, SOCIAL, AND HEALTH AND SAFETY POLICIES FOR THE PIC

#### A. ENVIRONMENT POLICY

In the PIC a significant importance is given to the protection of the environment. It is in this context that operations are carried out and businesses are conducted in a spirit of wisdom and responsibility. It is this spirit that the PIC is committed to meet environmental, economic and social needs and expectations of stakeholders. Such commitment is embodied in the following statement of the PIC's environmental policy.

#### **Environmental Management**

The following commitments are made:

- Integrate environmental integrity, social equity and economic viability into business processes.
- Provide staff with the resources to make environmentally sound decisions.
- Improve energy efficiency
- Assess the potential environmental impacts of activities and propose mitigation, where appropriate.
- Conduct operations in a manner intended to prevent pollution, conserve resources and deal responsibly with all environmental issues.
- Protect the soils and surface waters by minimizing erosion and run-off in the Park property.

<sup>&</sup>lt;sup>2</sup> Plans will include procedures, organizational resources (including roles and responsibilities), monitoring (including key performance indicators) and reporting requirements

Ensure preparedness with an effective emergency response program.

## Continuous Improvement

The following commitments are made:

- Promote innovative thinking in the development and implementation of new ideas relating to the environmental integrity.
- Measure performance using comprehensive audits.
- Establish environmental targets and objectives to improve performance.

#### Communication

The following commitments are made:

- Respond to the concerns and views of stakeholders in a timely and open fashion.
- Engage interested parties, when necessary, to discuss business operations and their relationship to affected communities and the environment.
- Provide clear and candid environmental information about the products, services and operations provided by the Park to customers, employees, government agencies and the public, as appropriate.

#### **B. COMMUNITY RELATIONS POLICY**

The PIC is committed to conducting business under the highest social performance standards in a manner that respects the environment, culture and customs of the communities within the area of direct influence of the project.

The PIC builds a legacy of trust by carrying out their activities with environmental and social responsibility and by implementing development that are sustainable and that consider a balance between the economic viability of the project and the needs of the communities in the direct area of influence.

The PIC commitments are based on the following community relations principles:

- Conduct operations with high standards for personal integrity and ethical behavior
- Respect the laws and regulations of the government with whom we work and the beliefs and values of communities.
- Respect the commitments in international labor and human rights conventions endorsed by Haiti.
- Promote equal opportunity for employment regardless of gender.
- Provide a means for open exchange of information that is clear and relevant among communities, leaders, affected parties and the PIC.
- Communicate expectations regarding community relations to all employees and contractors;

- Implement Corporate Social Responsibility programs that directly benefit the local communities; and
- Routinely review the effectiveness of community relations programs.

#### C. HEALTH AND SAFETY POLICY

The PIC is committed to conduct business safely and continually improving the policies and practices for the future. The aim is to create a workplace culture to integrate safety into all activities, everyday. A special effort will be dedicated to maintain the corporate goal of an accident-free workplace and will continue the pursuit of excellence in health and safety through the following practices.

#### Health and Safety Management

The following commitments are made:

- Conduct operations in a manner that protects the health and safety of employees, the public and the surrounding communities.
- Require employees from all levels of the organization to participate in Health and Safety Program and both individually and collectively take responsibility to work safely.
- Provide employees with the required job-related training and safety-related education.
- Seek compliance with all applicable legal and regulatory requirements.
- Investigate incidents and accidents to determine root cause.
- Ensure contractors that work for the Park are committed to conducting all business operations safely and in compliance with all applicable laws and regulations.

### Continuous Improvement

The following commitments are made:

- Employ regular audits to enhance successful accident prevention programs as well as to identify, if possible, areas for further improvement.
- Implement measures to minimize or eliminate all identified hazards in the Park and in all activities related to its operations.
- Maintain safety statistics for both employees and contractors to track improvement.
- Annually review the overall Health and Safety Program to ensure its on-going effectiveness.

#### Communication

The following commitments are made:

- Ensure all workers, whether contractors or employees, are aware of their right to refuse work that they determine to be unsafe.
- Inform employees and contractors of potential safety hazards on a continual basis.

- Encourage all workers to report immediately and, where appropriate, remediate any unsafe work conditions or activities.
- Openly communicate hazards and emergency response plans throughout the PIC employees and to affected communities and other stakeholders.
- Conduct general safety meetings and job-specific safety meetings as required.

#### 3. ENVIRONMENTAL MANAGEMENT

## 3.1. Waste management, including domestic wastes and hazardous wastes (including health clinic wastes)

### Waste Management

The Park Management Plan (PMP) shall provide the proper measures for waste handling, storage, transportation and disposal during the Operation Phase of the PIC. It must be responsible for the following activities:

- Waste characterization study
- Waste identification and storage (including site temporary storage locations, waste accumulation area, waste handling, waste transportation, determining the final destinations for waste (including the identification of approved waste receiving facilities) potential waste incineration requirements, management of medical wastes, management of liquid wastes, waste documentation, and training.
- The PMP should also address verification and monitoring processes.

## **Domestic Wastes**

- The Waste-management options will depend on the whether the industrial park provides solid and hazardous management services itself, or whether these will be the responsibility of an outside service provider. If the last case occurs, it is necessary that the Haitian waste disposal options and their suitability were assessed for the PIC.
- Solid wastes generated in textile industries (include trials, selvedge, trimmings, cuttings of fabrics, and yarns; spent dyes, pigments, and printing pastes; and sludge) should be effectively recycled or reused within the process or external (e.g. waste fibers, cuttings, and trimmings can be recycled as a feedstock for other operations, including low-grade products, non-wovens, insulation, and geotextiles).
- Management and disposal of hazardous and non-hazardous wastes should be undertaken in accordance with guidance included in the General EHS Guidelines.

#### **Hazardous Wastes**

- Within the Park, the hazardous wastes might come from tenants industries that use dangerous and chemical products. Therefore, tenants industries that use chemicals and hazardous products should be required to submit a plan for storage, spill control and clean up and disposal to the industrial park authority. Such plans should be based on best management practices for chemicals described in the IFC Environmental health and Safety Guidelines Textile Manufacturing and for hazardous materials on the IFC General EHS Guidelines<sup>3</sup>.
- The Park Administrator should implement systems for the proper screening, acceptance, and transport of dangerous cargo based on local and international standards and regulations.
- Chemical-handling facilities should be located with consideration of natural drainage systems and environmentally-sensitive areas (e.g. mangroves, corals, aquaculture projects).
   Hazardous materials storage and handling facilities should be constructed away from active traffic and protect storage areas from vehicle accidents.
- In order to avoid the spillover of chemical products, the tenants should elaborate
  prevention plans for the spillover of chemical products, it should include strategies for
  reduce/replace the use of most hazardous materials, procedures to manipulate and storage
  hazardous and non-hazardous materials, the criteria to select the places and construction
  characteristics of storage places, maintenance inspections and monitoring of
  facilities, awareness and continuing training of personnel, procedures for responding to
  spills.

## 3.2. Hazardous Products Management (chemical products and similar)

- The Park Administrator should implement systems for the proper screening, acceptance, and transport of dangerous cargo based on local and international standards and regulations, including the following elements:
  - Establishment of segregated and access-controlled storage areas with the means to collect or contain accidental releases;
  - Requesting Dangerous Goods Manifests for hazardous materials whether in transit, loading or unloading to and from ships, including proper shipping (technical) name, hazard class, United Nations number, and packing group;
  - Emergency response procedures (or require the tenants of the Park) specific to dangerous goods.
  - The following chemicals should be avoided: Chemicals prohibited by the Oeko-Tex Standard 1000; heavy benzene compounds used in emulsion concentrations of the pigment print process; dichromate's as oxidizing agents, unless replacement is not

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<sup>&</sup>lt;sup>3</sup> UNC – 2008. Environmental Management in Industrial Parks Background Paper – Colin Boocock

possible due to fabric characteristics and color fastness requirements; Chlorinated and fluorochlorinated solvents in open.

 Hazardous wastes must be collected in a suitable residual waste disposal for hazardous materials, authorized and consistent with applicable IFC guidelines.

## 3.3. Water management (surface - Riviere Trou du Nord, and underground)

- The best practice for water management in an industrial park requires the conservation and efficient use of water, reuse and recycling of surface water, rainwater and groundwater. In the particular case of the PIC, the hydrological assessments studies indicate that there is insufficient surface water available to satisfy the potential demand of the Park. Therefore, in order to meet the Park's demands, it is necessary to use the groundwater available without depleting the aquifer.
- Regardless of the source, the water will need to be treated prior to human consumption and before use for industrial purposes, therefore, the construction of the Water Treatment Plant is essential to cover these needs.
- Some of the best practices on water management for industrial purposes include:
  - Storm water management, based on a combination of the use of the site's natural hydrology for drainage, compact design and run-off reduction<sup>4</sup>.
  - Minimization of impervious surfaces (e.g. use of permeable pavements), swales and wetlands.
  - Alternative water sources such as treated wastewater recycling (e.g. for use as cooling water or in landscaping), rainwater harvesting and dual plumbing recycling of steam boiler condensates).
  - At the individual facility level, saving can be achieved through the use of alternatives source and appropriate plumbing devices such as dual flush toilets.
- For ground water use, it is imperative a proper planning and detail design. At the same time, it is necessary a rigorous program to monitor the quality of groundwater.
- The Park Administrator must disclose to the Park tenants the measures to reduce the amount of effluent, such as reducing water consumption by different means such as: the adoption of countercurrent washing (e.g. reuse the least contaminated water from the final wash for the next-to-last wash); the use of water flow-control devices to ensure that water only flows to a process when needed; and reuse of preparation and finishing water, among others.

<sup>&</sup>lt;sup>4</sup> The latter can be achieved through various methods such as the use of green roofs, rainwater harvesting (e.g. for use in the toilet flushing)

## 3.4. Effluents management

- Wastewater and residual water coming from the Park should be treated in a Wastewater Treatment Plant from Domestic and Industrial Effluents implemented by the Park. The design of this Wastewater treatment plant should include the following measures of treatment:
  - For Residual Water from domestic source:
    - Elimination of fat contents through screens, wire cloth or similar physical processes.
    - Removal of sand, and demulsification of fat in a channel-sand trap, degreaser with aeration, equipped with a longitudinal bridge, a sand pump and grease trap;
    - Recovery of sand, with elimination of water,
    - Anaerobic treatment or similar, centered on the first removal of a substantial part of organic matter.
    - Biological treatment, such as a conventional treatment of activated sludge or as an unconventional technology best suited to the local environment.
    - Disinfection of the effluent through a chlorination using products on the local market or disinfection and maturing in polishing ponds or maturation.
    - For the treatment of sludge channels, there should be a system for extracting sludge of anaerobic treatment, the thickness of sludge, dewatering systems, sludge stabilization system by quicklime, incorporating simplified hydration systems, the sludge system will be provided with a network of a drain opening into the pit, the water sector will be provided with the necessary by-pass.
  - For Residual Water from Industrial Source:
    - Pumping of raw water with emergency overflow and interconnection of pumping from domestic and industrial wastewater
    - Equalization tank to ensure a constant effluent pollution loads, an adjustment of pH and a decrease in temperature.
    - Pre-treatment for disposal of materials and fats.
    - Physico-chemical treatment with pH adjustment, series flocculated in thickener gravity.

- Anaerobic treatment or similar focus on the first removal of a substantial part of organic matter and biological treatment.
- Network of discharge devices discharging into the septic pumping for their recirculation into the treatment system.
- As for the textile sector, the Park Administrator should make sure that the enterprises installed in the Park follows the Environmental, Health, and Safety Guidelines for Textile Manufacturing, in particular, those measures related to industrial wastewater:
  - o Industry-specific wastewater effluents are related to wet operations, which are conducted during different parts of the textile manufacturing process. Process wastewater from textile manufacturing is typically alkaline and has high BOD (from 700 to 2,000 mg/l) and COD loads. Pollutants in textile effluents include suspended solids, mineral oils (e.g. antifoaming agents, grease, spinning lubricants, non-biodegradable or lowbiodegradable surfactants [alkylphenol ethoxylates APEO, nonylphenol ethoxylates], and other organic compounds, including phenols from wet finishing processes (e.g. dyeing), and halogenated organics from solvent use in bleaching. Effluent streams from dyeing processes are typically hot and colored and may contain significant concentrations of heavy metals (e.g. chromium, copper, zinc, lead, or nickel).
  - Techniques for treating industrial process wastewater in this sector include source segregation and pretreatment of wastewater streams as follows: (i) high load (COD) streams containing non-biodegradable compounds using chemical oxidation, (ii) reduction in heavy metals using chemical precipitation, coagulation and flocculation, etc. and (iii) treatment of highly colored or high TDS streams using reverse osmosis.
  - Additional engineering controls may be required for (i) advanced metals removal using membrane filtration or other physical/chemical treatment technologies, (ii) removal of recalcitrant organics, residual pesticides and halogenated organics using activated carbon or advanced chemical oxidation, (iii) residual color removal using adsorption or chemical oxidation, (iv) reduction in effluent toxicity using appropriate technology (such as reverse osmosis, ion exchange, activated carbon, etc.), (v) reduction in TDS in the effluent using reverse osmosis or evaporation, and (vi) containment and neutralization of nuisance odors.
  - The Park Administrator should assure that the final effluents are consistent with the guidelines mentioned above.

## 3.5. Air quality management (including odors)

The main sources of atmospheric pollutants related to Industrial Park activities will be the emissions coming from operations from the tenants installed in the park. According to the available information, at this moment the Park will gather only textile industries. If other industries from other sectors are installed in the Park, the Park Administration will adjust the plan for monitoring of air pollutants, as directed by the IFC. Significant sources of air emissions in textile operations include drying, printing, fabric preparation, and wastewater treatment

residues. Solvents may be emitted from coating / treatment finishing processes, drying ovens, and high-temperature drying and curing.

#### Dust

- Dust emissions associated with textile manufacturing occur during natural fiber and synthetic staple processing and yarn manufacturing. Fiber (especially cotton) handling and storage are sources of dust, particularly within work areas. The main sources are bale breakers, automatic feeders, separators and openers, mechanical conveyors, pickers, and cards. The recommended prevention and control methods for these main sources of dust emissions include:
  - Enclosure of dust producing equipment, and use of local exhaust ventilation;
  - Use of dust extraction and recycling systems to remove dust from work areas;
  - o Installation of fabric filters to prevent outdoor emissions.
  - Installing and modifying equipment to reduce solvent use;
  - Adopting water-based methods for removing oil and grease from fabric instead of using volatile solvents;
  - Substituting cleaning solvents with less toxic solvents, particularly chlorinated solvents;
  - Recovery of VOCs through vapor recovery units, and use of a fully closed-loop system, especially if cleaning with halogenated organic solvents cannot be avoided (e.g. for fabrics that are heavily loaded with silicone oils);
  - Using appropriate control technologies (e.g. diversion of stack emissions through boilers; installation of scrubbers with activated carbon slurries; installation of activated carbon absorbers; or incineration of extracted vapors in a combustion system).
- The use of asbestos fibers as a source of natural fiber in the manufacturing of staple is no longer considered good industry practice and must be avoided

#### Odors

- In order to prevent and minimize odors coming from activities that may cause odors, particularly during the process of dyeing and other finishing processes, and when using oils, solvent vapors, formaldehyde, and other chemicals, the Park Administrator must ensure that companies adopt appropriate techniques applicable in a way that they avoid the odor to the exterior of work. Some examples of appropriate technology:
  - Substituting odor-intensive substances with less impacting compounds (e.g. sulfur containing dyestuffs and reducing agents with non-pre-reduced sulphide-free

- dyestuffs; sodium dithionite in dyeing after treatment with aliphatic short-chain sulfinic acid derivatives);
- o Installing and modifying equipment to reduce use of odorous chemicals;
- Capturing and recovering the off-gases from the processes(e.g. installation of heat recovery systems);
- o Routing of stack emissions through boilers to reduce odor emissions.

## 3.6. Transportation Management Plan (Circulation and Parking inside the Park)

- The Transport Management Plan (TMP) establishes the procedures to meet key plan objectives including:
  - Avoidance of incidents and accidents while vehicles are being driven (and while transporting personnel, materials, and equipment) to and from the project site;
  - Raising safety awareness in each driver, so as to ensure compliance with all safe driving provisions and respect for traffic regulations and legislation in Haiti and inside the Park property;
  - Avoiding pollution and the deterioration of access roads.
- The following approach reflects the broader goals of the Project's Transport Management Strategy:
  - To provide communities affected by traffic from the PIC Project with sufficient information on the effects of the project-specific traffic and the opportunity to resolve traffic related complaints.
  - To establish limitations on the size, number, frequency, and timing of projectrelated vehicles on specific roads as to minimize negative impacts on population and the surrounding environment, where necessary.
  - To control hazards associated with project-related traffic through project speed limits, driver training, journey management, and appropriate signage.
  - To reduce impacts on the environment through effective emissions control, high standards of vehicle maintenance, adherence to relevant standards including noise emissions, and defined working hours.
  - o To review the effectiveness of the Transport Management Plan (TMP) and revise the mitigation measures employed if necessary.

The Plan must establish the criteria and procedures for the selection of access roads that favor existing roads and require internal environmental and social clearance by the PIC for any new permanent or temporary access roads. The Plan should also include requirements for mapping sensitive points including areas of high pedestrian traffic and a documented inventory of local structures including housing that might be vulnerable to vibrations. The Plan must mandate contractor use of a Safe Driver Training Course for all drivers, specifies minimum vehicle conditions, required vehicle safety equipment (including a first aid kit), emergency response needs, equipment and readiness. Journey management requirements must also be prescribed.

## 3.7. Monitoring Programs

• This monitoring program for the Operation Phase of the PIC is based on the good international practices and the directives and Guidelines from both the IDB and IFC. This program will be detailed and updated while the rules of operating standards of the Park will be developed by the Park. The Park Administrator should have in place a technique team responsible for the monitoring of the Management plans from the Operational Phase.

## 3.7.1. Wastes (Déchets solides)

- The Monitoring of the waste management should adopt as reference the indicators from the IFC EHS Guidelines applicable to activities that will be carry out in the Park (such as textile manufacturing, the power plant and its generator, the central water treatment plant effluent treatment, and even the possibility of manufacture of furniture).
- Below we include the table with Waste Management limits for the Textile Industry.
   Considering that the great part of tenants will be performing garment fabrication as opposed to textile fabrication, it is convenient that the Park Administrator review this table, such that it can perform according to limits for the Industries of the Park.

Table 01 : Waste Management						
Outputs per unit of Product	Unit	Industry Benchmark				
Wastewater-Wool Scouring	l/kg	2-6				
Wastewater -Yarn Finishing Wool	l/kg	35-45				
Wastewater - Yarn Finishing Cotton	l/kg	100-120				
Wastewater - Yarn Finishing Synthetic Fibe	l/kg	65-85				
Wastewater - Knitted Fabric Finishing Wool	l/kg	60-70				
Wastewater - Knitted Fabric Finishing Cotton	l/kg	60-135				
Wastewater -Knitted Fabric Finishing Synthetic	l/kg	35-80				
Fiber						
Wastewater - Woven Fabric Finishing Wool	l/kg	70-140				
Wastewater - Woven Fabric Finishing Cotton	l/kg	50-70				
Wastewater - Woven Fabric Finishing + Print	l/kg	150-80				
Cotton						
Wastewater- Woven Fabrics Finishing +	l/kg	100-180				
Synthetic Fibe						
Sludge from Wastewater –Treatment	kg/m3 d'eaux	1-5				
	usées traitées					

Source: Environmental, Health, and Safety Guidelines TEXTILE MANUFACTURING. April, 2007.

## 3.7.2. Liquid Effluents

• The monitoring of liquid effluents will be based on the direct and indirect indicators from effluents applicable to the project. The effluents level for the textile industry is specified on the following table:

Table 02: Effluent levels for the textile industry <sup>5</sup>						
Polluants	Units	Guidelines Value				
Ph	-	6-9				
BOD	mg/L	30				
COD	mg/L	160				
AOX	mg/L	1				
TSS	mg/L	50				
Oil and Greas	mg/L	50				
Pesticides	mg/L	0.05-0.10 <sup>6</sup>				
Cadmium	mg/L	0.02				
Chromium (total)	mg/L	0.5				
Chromium (hexavalent)	Mg/L	0.1				
Cobalt	mg/L	0.5				
Copper	mg/L	0.5				
Nickel	mg/L	0.5				
Zinc	mg/L	2				
Phénol	mg/L	0.5				
Sulfide	mg/L	1				
Total Phosphorous	mg/L	2				
Ammonia	mg/L	10				
Total Nitrogen	mg/L	10				
Coulor	m <sup>-1</sup>	7 (436 nm, yellow)				
		5 (525 nm red)				
		3 (620 nm, bleu)				
Toxite to Fish Eggs	T.U. 96th	2				
Temperature increase	ōС	<3				
Coliform bacteria	MPN/ 100 ml	400				

Source: Environmental, Health, and Safety Guidelines TEXTILE MANUFACTURING. April, 2007.

 It is necessary to install permanent meteorological and gauging stations in the river to measure the quotidian precipitations and the river flow in real time to be collected over a period of at least one year.

## **3.7.3.** *Air Quality*

• The baseline to measure Air Quality is the measure of pollutants (CH<sub>4</sub>, SO<sub>2</sub>, etc.) resulting from industrial operations, including those from textile sector. Before designing the monitoring program, it is necessary to set out a detailed examination in order to determine: i. The type of emission that should be monitored, ii. The monitoring locations, iii. The potential need of a permanent monitoring station.

<sup>&</sup>lt;sup>5</sup> At the edge of a scientifically established mixing zone which takes into account ambient water quality, receiving water use, potential receptors and assimilative

<sup>&</sup>lt;sup>6</sup> 0.05 mg/L for total pesticides (organophosphorous pesticides excluded); 0.10 mg/l for organophosphorous pesticides...

#### 3.7.4. Air Emissions

• As for Atmospheric Emissions, one of the examples and according to good international practices, and following the Environmental, Health and Safety Guidelines from the IFC for the Textile Industry, samples of ambient air for the analysis of a broad spectrum of volatile organic compounds (VOCs) as well as airborne particulate matter with a median aerodynamic diameter less than 10um (PM10) would need to be collected during at minimum the dry season and the wet season to reflect the two likely extremes of seasonal conditions. The total parameters that might be applicable to the limits established, are included in the following table:

Table 03 : Air emission levels for textile industry <sup>7</sup>								
Polluants	Units	Guideline Values						
COV	Mn/Nm <sup>3</sup>	2 /20/ 50/ 75/100/ 150						
Chlore	Mn/Nm <sup>3</sup>	5						
Formaldéhyde	Mn/Nm <sup>3</sup>	20						
Ammoniac	Mn/Nm <sup>3</sup>	30						
Particules	Mn/Nm <sup>3</sup>	50						
H <sub>2</sub> S	Mn/Nm <sup>3</sup>	5						
CS <sub>2</sub>	Mn/Nm <sup>3</sup>	150						

Source: Environmental, Health, and Safety Guidelines TEXTILE MANUFACTURING. April, 2007.

#### 3.7.5. Noise

• The average index of noise should be determined by performing real-time measurement of noise levels at the proposed site and the nearest receiver. The noise monitoring will be performed using a noise dosimeter in real time. Noise measurements should be taken throughout the day of the visit within the site to determine the average noise level and peak, as well as the levels of background noise.

Table 04 : Noise Level Guidelines							
	One hourL <sub>Aeq</sub> (dBA)						
Receptor	Day time(07h.00-22h.00)	Night time (22h.00- 07h.00)					
Résidentiel, institutionnel, éducatif	55	45					
Industriel, commercial	70	70					

Source: Environmental, Health, and Safety General Guidelines. April, 2007.

## 3.7.6. Workplace Conditions

Health and Safety

<sup>7</sup> Guideline values are applicable to installations with a solvent consumption > 5t/a.

<sup>&</sup>lt;sup>8</sup> Calculated as total carbon. As the 30-minute mean for stack emission. Applicability of guideline values:- 2 mg/Nm<sub>3</sub> for VOCs classified as carcinogenic or mutagenic with mass flow greater than or equal to 10 g/hour.

- The OECD has established the best practices for Industrial Parks, which requires labor standards to include ILO core rights and obligations. There are a set of four internationally recognized basic rights and principles at work, namely:
  - Freedom of association and the effective recognition of the right to collective bargaining.
  - Elimination of all forms or forced compulsory labor.
  - o Effective abolition of child labor, and
  - Elimination of discrimination in respect of employment and occupation.
- Occupational health and safety within individual tenant companies is their responsibility (i.e.
  at the primary level) but at the secondary level where one tenant's activities affect
  neighbors it becomes the responsibility of the IP manager. Although the activities of
  individual companies may not be particularly hazardous, their clustering can result in a
  greater combined risk.
- Nevertheless, the IP manager will have to work with the companies to minimize the comibined risk, which may be better achieved if the park offers some common services I the health and safety area, such as:
  - Training for workers of all tenants in field such as awareness of hazards in the workplace, health and safety procedures, emergency response, first-aid, and incident reporting and accident prevention.
  - A central information center on chemical hazards with material safety data sheets and lines to other sources of information on safety and health issues.
  - Provision of a first aid center or small medical centre that can intervene in the event of minor accidents.
  - Provision of a fire-service.

#### 3.7.7. Others

 Other aspect that requires special attention is the potential arrival of new tenants to the Industrial Park. To this end, the "Park Administrator" must determine the environmental criteria for admission of new tenants to the Industrial Park, and thus, it must request sufficient information regarding the environmental aspects of activities from proposal tenants.

### 4. SOCIAL MANAGEMENT

## 4.1. Local Hiring Plan

- The magnitude of the PIC project (the estimation of the creation of aprox. 32.500 new permanent employments) has created expectations among the inhabitants of the surrounding areas of the project. But at the same time there is a risk of tension between the members of local communities and the immigrants that will come to the region, especially if the local habitants estimate that they do not have the possibility to get benefits from the project in terms of employment.
- The Employment policy for workers and contractors applicable to the Park operation will be elaborated according to Haitian regulations and the Park Administrator, and should be followed by the tenant's enterprises in the Park. This policy must give the priority to local inhabitants in terms of provision of goods and services of the Park, and to local enterprises.
- The recruitment policy of the work force and the procurement policy should be based on the following premises:
  - The engagement process and acquisition should be accessible to the public through employment offices widely distributed in both the region and the community, so that it avoids strictly the acquisition and the employment "at the gate", in any form or what so ever.
  - Pamphlets and brochures must be written and distributed in communities and surrounding villages as well as in communities where migration is expected (Cap-Haitien, etc.).
  - The hiring process of workers should be exclusively through the "Office of Employment" open at County Level and should allow an equitable distribution of employment between the communities surrounding the park. The Park Administrator (or the local enterprises, directly) should provide to the Mayors, the list of offers and qualifications, as well as the official form of application for employment to be completed by applicants.
  - Local governments will have the responsibility to provide the norms and forms completed by potential workers. The Park Administrator should reinforce the prohibition to tenants to hire at the gate of the industrial park. Those people interested should be directed to recruitment offices in the cities or "mayor's offices".

### 4.2. Influx Management Plan

- The Influx population Management Plan has identified the roles and responsibilities from the Haitian Government and the authorities to control the impact of the increase influx of population during the Operation Phase of the PIC (including the Power plant financed by the Government of the United States).
- The Park Administrator should develop a communication strategy; provide a transport system and provide a continuing training program for workers. At the same time, it should

ensure that the tenant companies provide housing for workers that do not live in the communities surrounding the Park, all to avoid the formation of slums around the Park. In the event that the Park Administrator identifies the formation of slums around the Park, it should make a writing communication to the local authorities.

## 4.3. Stakeholders' Engagement Plan (SEP)

- The Stakeholder Engagement Plan (SEP) should address the activities for stakeholder engagement though the project operation and decommissioning stages of the PIC project. This document should be revised and changed over time to reflect extra information gained through the stakeholder engagement process.
- The Stakeholder Engagement Plan should:
  - Provide timely and continuous information about the PIC project and their potential impacts on affected communities and other stakeholders;
  - Provide opportunities to stakeholders to voice their opinions and concerns in a way which is most appropriate to the circumstances, and
  - Provide an opportunity for feedback to, and discussion with, the affected communities concerning measures proposed.
- The PIC project is committed to conduct stakeholder engagement on three levels: international, national, and local. The following activities should be envisaged at each level:
  - o Identification, categorization and prioritzation of project stakeholders and mechanisms for stakeholder feedback and information sharing.
  - An outline for consultation and disclosure activities, starting at the project operation and continuing until and throughout the decommissioning of the project.
  - Ensuring that issues raised by project stakeholders are addressed in the assessment reports as well as in project decision- making and design.
  - The Stakeholder Engagement Plan should also be linked to the grievance mechanisms designed and implemented by the PIC and contractors.

## **4.4. Security Management Plan (Voluntary Principles on Security and Human Rights)**

The Security Management Plan is designed to address general security principles regarding:
working with the government of Haiti; working with Project affected population; grievance
mechanisms; private security forces; and the identification and management of risks. The
Security Management Strategy should provide a brief overview of the security situation in
Haiti in recent years and present the overall security strategy that will be implemented in
respect of the identified potential threats and other security risks.

• The Security Management Plan must include the commitment of the PIC to manage security risks in full compliance with the laws of Haiti and international best practice, in particular the Voluntary Principles on Security and Human Rights.

#### 4.5. Workers' Code of Conduct

- The Park Administrator should require that companies follow the tenants of the Park the Code of Conduct of Haiti, including the standards related to: Verbal Contract, Documents Required, Health and Safety, Labor Inspection and Regulation of accidents and disputes.
- The most important regulations in the Workers Code of Conduct include the following measures (Art. 477-479):

Art. 477: Les employeurs des entreprises agricoles, commerciales, industrielles et de toutes entreprises de quelque nature que ce soit occupant au moins vingt salariés devront s'assurer du service d'un ou de plusieurs médecins, dont le rôle consistera à éviter toute altération de la santé des travailleurs et les risques de contagion, à maintenir des conditions d'hygiène du travail ou à apporter les premiers soins en cas d'urgence. Ces médecins seront assistés d'une ou plusieurs infirmières suivant l'importance de l'entreprise.

Art. 478: Les médecins fourniront leurs services à l'entreprise de la manière suivante: i. une fois par semaine pour une entreprise occupant au moins vingt salariés; ii. Deux fois par semaine pour une entreprise occupant au moins cent salariés; iii. Trois fois par semaine pour une entreprise occupant au moins deux cents salariés, iv. Les entreprises occupant plus de deux cents salariés auront un service médical permanent comportant au moins un dispensaire.

Art. 478: Les entreprises visées dans le présent chapitre devront s'assurer à temps complet les services d'infirmières diplômées à raison de: i. Une infirmière pour chaque établissement occupant cinquante à deux cents salariés; ii. Deux infirmières pour chaque établissement occupant deux cents à cinq cents salariés; iii. Au-dessus de cinq cents salariés, une infirmière supplémentaire par tranche de deux cents salariés.

• The objective of the Worker's Code of Conduct is to avoid or minimize as much as possible, any negative impact that could be produced as a consequence of interrelations between the Workers inside the local areas of influence and the outskirts of the Project Area.

#### Sanctions

- The Park Administrator should require that the tenants of the Park comply with the following measures:
  - Each of the Workers should receive a written copy of this Code as a part of the induction process. Additionally, a copy of this Code will be available in a visible place in each Area of the Project.
  - As a requirement to be hired, all Workers must sign a copy of this Code, where they
    acknowledge it and certify they have read it and accepted its terms, promising to
    comply with its terms thoroughly and at all times.

- Any question related to this Code or any regulation within it must be addressed by a representative designated by the Park Operator Manager.
- The workers are obliged to comply with the rules and procedures indicated in this Code, so as to maintain good relations with the local communities in the direct area of influence of the Project.
- Any worker may be subject to disciplinary actions and/or may be fired if their behavior while he was employed by PLNG went against the rules stated in this Code.
- This Code can be modified at any moment by Park Operator Manager, in which case it will immediately deliver a written copy of said change to each Worker, in accordance with the assent procedure explained before.

## Rules regarding the local population

- The local population is defined as all people that live within the direct area of influence of the Project, or in the areas used for the transportation of equipment and materials required for the construction or operation stages of the Project.
- All workers are expected to behave adequately at all times and must avoid improper relations with the local population.
- Any public release about the Project must be approved by the Management Contractor or the person he appoints.
- All workers shall avoid any discriminatory conduct based on gender, age, disability, race, language, culture, political affiliations, philosophy, religion, or any other illegal basis.
- All workers must comply with, at all times, with all applicable environmental rules and regulations, including complying with the social and environmental responsibilities the PIC has implemented.
- Should the worker fail to comply with the Code, or behave in such a way that he/she creates a problem with the local population, the corresponding action must be communicated to the Community Relations manager, detailing what happened, so that the Park Administrator can carry out an investigation.

#### Rules regarding the Operations stage:

- All Workers are required to show at all times a transparent and honest behavior, and a high level of personal responsibility and professionalism, either in or out of the Project Area.
- o All Workers shall comply with all applicable laws, rules and regulations.
- The PIC shall require all Workers to take the medical exams necessary to work and enjoy good health. Workers shall immediately inform medical staff in the Project Area about any kind of sickness or symptom that may affect their ability to carry out their workrelated obligations properly.
- Workers shall use adequate personal protection equipment during their activities in any Project Area or property, including Project Vehicles.
- Workers are not allowed to smoke or make an open fire within or in the surroundings of the Project Area or near any Project Property, including Project Vehicles.
- The medical staff in charge of the project shall authorize possession and use of drugs within the area of influence of the project.

- Workers are forbidden to possess, use or carry any kind or illegal drugs, medical paraphernalia, narcotics or alcoholic beverages within the Project Area or any Project property, including Project Vehicles.
- Workers are not allowed to possess or carry weapons, such as firearms, explosives, ammunitions, knives, clubs, etc., within the Project Area or any Project Property, including Project Vehicles.
- o All Workers shall report any conflicts of interest in writing to their supervisor.
- Workers shall not receive or hand over money, goods or other objects of value in order to obtain benefits, receive favors or influence decisions benefiting PIC, third parties, or themselves.
- Workers shall not use PIC funds or equipment or other articles provided by the Industrial Park for their personal benefit or any other unauthorized use.
- Workers shall keep all information related to the project in the strictest confidence.
- O Workers shall carry an easily detectable ID card at all times whenever they are inside any Project Area. Workers shall show their ID card to go in or out of any Project Area, or to use transportation provided to the Workers. It is not necessary to carry the ID card when outside of the Project Area, unless the Worker is carrying out a business related task.
- Pets are not allowed in any Project Area. Fishing, hunting and deforestation is also forbidden inside the Park area and its immediate surroundings.
- o For industrial security reasons, Workers may not abandon any Project Area without permission. Local Workers should be transported to their residence in transport units provided by the Project. Project Transport Units may not make unauthorized stops.

## 4.6. Workers' Training Plan

- The ESHS Training Plan refers to how the project intends to ensure that every employee receives appropriate training for the proper and safe development of their tasks. It explains also the systems and procedures established to ensure that each of them receives appropriate training for the proper and safe development of their tasks.
- The Plan should sets out a program for the disclosure of PIC's policies and safe working practices by means of an effective and informative training and orientation program that is delivered to all staff, including contractors, and promotes active participation in environmental, social, health and safety plans. The Plan should be elaborated with the following expectations:
  - O Deliver a system that provides qualified employees with environmental, social, health and safety specific training that promotes full compliance with the commitments.
  - Project and Contractor organizations develop an ESHS Training Program for each position.
  - Records are kept to confirm the attendance of every employee to the designated training events.
  - PIC and Contractor employees should develop and maintain appropriate environmental, social, health and safety behaviors by observing the good practices of, and mentoring by, management and supervisors.

- The annual review of each employee's performance includes environmental, social, health and safety considerations.
- All training is completed before workers enter the work site or conducts a task for which the training is required.

The Training Plan should include the following elements:

- Induction for new employees
- Daily lectures on safety and environment
- Management plans training
- Safety and environmental education
- Induction for drivers
- Induction for managers and supervisors
- Equipment training and instruction
- Monitoring of training
- A training matrix

## 4.7. Local Procurement and Supply Plan

- The Local Procurement and Supply Plan identifies commitments made in relation to recruitment, procurement and community liaison during the operation phase of Industrial Park, and should present pertinent policy and legislative requirements applicable to the PIC project, the Haitian legislative requirements, and international standards and guidelines.
- The Local Procurement and Supply Plan define roles and responsibilities and specify required contractor actions, focusing on the requirement for the contractors to develop and implement an approved Recruitment, Procurement and Community Liaison Plan.
- The Local Procurement and Supply Plan should specify specific contractor actions to address: community relations; training; the appointment of contractor community relations officers, contractor resources; the interface with communities and other stakeholders; recruitment; procurement; and contractor documentation. It should also address verification and monitoring processes, and the requirement that the contractors submit a monthly monitoring report to the Park Administrator.

## 4.8. Workers' and Community Safety Transportation

- The Community Safety and Transportation Plan shall identify the commitments made in relation to community safety and transportation during the operation Phase of the PIC and describe the PIC s requirements to all enterprises operating in the PIC.
- It shall describe the policy and legal framework governing community safety and transport and specifically Haitian legislative requirements, applicable international standards and guidelines, as well as project commitments.

- The Plan should explain how, in situations where disruption of normal traffic patterns and pedestrians within the local community is anticipated, temporary alternatives can be established. Examples of alternatives include:
  - Banning contractor traffic from particularly sensitive or dangerous local roads and paths, and instructing drivers accordingly.
  - Banning contractor traffic from particularly sensitive or dangerous local roads and paths at particular times of the day (e.g., at the start and/or end of the school day), or on particular days (e.g., weekends, public holidays) and instructing drivers accordingly.
  - Installing traffic control measures (such as posted speed limits, stationing of traffic
    marshals or the use of devices to slow traffic) at locations of particular sensitivity or
    specific and identified hazards.
- Contractors should be required to ensure all drivers hold a current driving license applicable to the vehicle they are responsible for driving, as well as undertake a defensive driving course. They should also be required to Contractor inform residents of the communities in a timely manner of the volume of trucks that will transit, the length of time the trucks will transit, the transit hours and the possible impacts and mitigation measures proposed.
- The Plan should describe the potential risks to communities and detail a range of mitigation measures for each risk. Some of the risks, situations and activities may include:
  - Accidents during road crossings
  - Hazard to children in adjacent communities
  - Blasting hazards
  - Hazardous materials
- In addition, transport related impacts can be reduced by developing public transport systems such as buses to transport the workforce and from the PIC<sup>9</sup>.

## 4.9. Human Resources Policy

Based on an approach to community action, we considered two groups of human resources:
 Human Resources from Park tenant and Human Resources from the Park Administrator
 must make sure that the policies of human resource management being consistent with
 tenant companies with its own policies, the Haitian legislation and the IDB policies and will
 invited by the company.

#### 4.10. Grievance mechanism

The Park Administrator should implement a Worker's Grievance Procedure consistent with
its policy of building and maintaining strong relationships with the local communities, in
order to manage and appropriately answer complaints made by the population located
within the Project area of influence, as well as by workers.

<sup>&</sup>lt;sup>9</sup> Boocok (December 2010) – Environmental Management in Industrial Parks – (UNEP, 2001)

- The plan should describe the objectives, scope and mechanisms of the Grievance Procedure, which will be available to any type of employee of the PIC who considers himself/herself affected by Project activities, as well as to any persons in the area of influence of the Park.
- The procedure should establish specific objectives and key performance indicators for participation, effectiveness, resolution, recurrence reduction and influence of complaints. It also should state the responsibilities of both the PIC and contractor personnel, defines complaint types and specifies detailed procedures covering items such as: mechanisms to identify and/or receive complaints; reception of complaints; complaints registry; centralization of complaints; and complaint analysis. The review and resolution of complaints and appeals should be discussed in terms of first and second reviews, responsibilities of resolution, resolution time, and monitoring. The Procedure should include specific disclosure provisions.

## 4.11. Corporate Social Investment/Social Investment Plan – (CSIP)

- The Corporate Social Investment/Social Investment Plan (CSIP) should describe the development and implementation of PIC's community investment program. The CSIP should provide the basis and context for the program, as well as defining roles and responsibilities. It should reflect PIC's corporate social responsibility and stewardship to the communities in the Project's area of influence.
- The program should be based on partnerships in which mutual "enlightened self-interest" and is expected to contribute to success through cooperation and collaboration between the PIC project, the governments (local, regional, and national), non-government organizations (NGO's), communities, businesses, and individuals.
- The general objective of the program should be to add recognized value beyond Project-related employment for communities in the Project's area of influence through the promotion of sustainable social and economic development. Some of the objectives should include:
  - o Improve the quality of life for the population within the influence area of the PIC activities through sustainable development.
  - Optimize PIC expenditures for community development by prudent management and leveraging partnerships with governmental bodies, NGOs, businesses, and financial organizations.
  - Meet the expectations of local stakeholders and Project lending institutions for corporate social responsibility and social investment.
  - o Build and maintain a strong working relationship between the communities and PIC.
  - o Realize mutual benefits for the communities, government, and PIC.
  - Create and maintain a positive public image, name recognition, community support, and trust for PIC.

- Reduce PIC operating risk due to civil unrest or government opposition directed against PIC by strengthening synergies and building respect and loyalty in the Project's area of influence.
- The underlying strategy in meeting program objectives should be to contribute directly and immediately to improving the lives of the people who will be most impacted by operation of the Industrial Park. Priority should be given to implement projects that maximize benefits and sustainability while keeping delivery costs to a minimum. More specifically, the PIC must adapt some principles to incorporate the following strategies in the CSIP:
  - A participatory approach to design and implement the community investment program ensures that PIC, community, and government objectives are aligned.
  - Baseline social data and assessment of stakeholder needs will be incorporated into the identification and selection of valued projects, implementation of projects, and monitoring to determine success in meeting objectives.
  - Stakeholders and stakeholder needs are prioritized in order to focus resources where they are most likely to meet the objectives desired by internal and external stakeholders.
  - Specific criteria that allow for flexibility to accommodate geographic and structural differences while ensuring effective delivery and collaboration with communities and other stakeholders.
  - Methodologies that have been developed and successfully implemented by organizations involved in community development worldwide are utilized.
  - o Continual communication, consultation, and coordination with beneficiaries and strategic partners are critical to the long-term success of the program.
  - Criteria with flexibility to accommodate social, economic, and resource variations across the Project operating areas are established for project and implementation partner selection, as well as for monitoring.
  - Cooperative and collaborative partnerships with public and private entities, as well as other relevant interested parties, optimize available resources, strengthen organizational capacity, and reduce dependency on donor organizations.
  - o Indicator metrics and monitoring programs are developed and utilized to determine success in achieving targets and objectives and to ensure continuous improvement.

#### 5. HEALTH AND SAFETY MANAGEMENT

The purpose of the HS Management Plan is to provide all employees and contractors with a clear understanding of the PIC's workplace health and safety expectations. The HS Management Plan is a core business practice and should provide details regarding: i. Personnel responsibilities; ii. Workers' right to refuse unsafe work; iii. Legal and regulatory requirements; iv. Safety committee and safety meetings; v. Safety performance measurement; vi. Hazard assessment and risk management; vii. Risk assessment for tasks; viii. Characteristics and classification of risk; ix. Risk controls; and x. Accident reporting and investigation.

The Health and Safety Management Plan should include information on a wide range of HS topics that are likely to be relevant to the PIC Project including: hazardous materials controls; various traffic and driving regulations, codes and restrictions; security, hygiene, ergonomics, medical and first aid information; etc.

#### Occupational Health, Industrial Safety and Accident Prevention

- The contractor shall have an Occupational Health, Industrial Safety and Accidents Prevention Plan, who shall establish the necessary policies and the staff's obligation to know, comply with, and respect these policies.
- The contractor shall oblige its employees, suppliers and agents related to the contract execution to comply with all conditions relating to occupational health, industrial safety and accident prevention, as established by the contract documents.
- Whenever the Environmental Supervising Entity requires, the contractor shall review and adjust the Occupational Health, Industrial Safety and Accidents Prevention Plan. Work may be suspended when the contractor does not comply with the occupational health requirements or does not follow the instructions.
- The contractor shall inform the Park Administrator in writing of any accident occurring at the work sites. The contractor shall also keep a register of all occupational illnesses occurring among the personnel and damages caused to property or public goods. Monthly reports on these topics shall be prepared.

#### **Operational Accidents**

- The management contractor's personnel shall be equipped with personal and mass protection equipment appropriate for the risks they face (proper clothing, helmet, gloves, boots, goggles, ear protection, when necessary, etc.). The protective equipment shall be of good quality and shall be periodically checked to guarantee their proper condition.
- The work staff shall be informed about the risks of every task, the proper way to use the
  material, tools and equipment available, and the way to timely and suitably aid any injured
  person. The management contractor shall supply the working areas with stands, workshops,
  warehouses and all other temporary premises, stretchers, first-aid kits and other equipment
  to enable the provision of first aid assistance.
- The management contractor shall supply equipment, machinery and tools suitable for each type of work. These shall be operated by qualified and authorized personnel and used only for the purpose for which they were designed. They shall be periodically inspected and then repaired or returned, and shall be provided along with the devices, instructions, controls and safety signals as required or suggested by the manufacturers.
- The management contractor is obliged to use only automotive vehicles in perfect operating condition, to appropriately and safely transport people, material and equipment, according to the transportation and transit authorities' regulations. Vehicles shall be driven by trained personnel, shall be duly marked and shall have the necessary warning labels.

- All vehicles shall be checked by the driver before being operated and a Check List shall be completed. This form shall report the vehicle condition, possible defects in their operation and detect any leakage.
- Work sites shall maintain appropriately lighting in such a way that all activities can be carried out safely. Lightning sources shall not limit the visual spectrum nor produce dazzles.
- Warning and informative signals shall be placed at important places within the Industrial Park Area to avoid accidents on the access roads, hazardous slopes and, in general, in places representing any kind of hazard.

### 6. CONTINGENCY AND EMERGENCY MANAGEMENT

## 6.1. Emergency management planning

The Management Contractor shall develop an emergency management plan to guide the coordination and operational handling of emergency situations, including: i. Structure and operation of the emergency management team; ii. Establishment of an emergency management centre; iii. Information retained by the emergency management team; iv. Incidents requiring activation of the plan; v. Incident severity classification; vi. Process to be followed in the event of an emergency.

## 6.2. Emergency response plan

The Park Administrator must develop and implement a community health and safety plan, including a comprehensive emergency response plan for the park, in conjunction with the emergency services of the local municipality. As a minimum requirement, the plan must cover the following aspects:

- Haitian and international safety regulations,
- Scope of the emergency response plan,
- Notification of local authorities,
- Details of the industrial park,
- o Aim of the emergency response plan
- Objective of the response plan.
- Emergency arrangements, procedures and plans.
- o Roles and responsibilities in the event of an emergency.
- o Information requirements in the event of an emergency.
- Evacuation of people.
- The role of local communities
- Regular testing of the emergency response plan.
- Planning for the eventuality of failures associated with the project and associated infrastructure.
- Causes of the project failures.
- Probability of the project failures

- Hazards and effects of the project failures, including fire, explosion, toxic effects, blast effects, asphyxiation effects, noise and damage to nearby assets, such as water resources.
- Hazards range and emergency planning distances.
- Anticipation of worst credible incidents.

The emergency response within the industrial park lies with the Industrial Park Manager. Individual tenants should develop internal emergency response procedures such as spill control and cleanup plan, which must be compatible with the IP response plan.

#### Fire Prevention

In the eventual case of a Fire, the Plan should include an effective program for preventing and controlling potential fire, including the following:

- Identification, handling and proper use of flammable material;
- Order and Cleanliness;
- Proper usage of equipment of flame cutting (oxicorte), welding, grinder, etc;
- Fire Extinguisher Control and maintenance;
- Fire extinguishers Supply;

Security Measures in the Occurrence of Major Earthquakes

The impacts of the occurrence of major earthquakes are strictly related to damage to the industrial park facilities and eventually to the Power Plant Facilities, which could cause a leak or spill, respectively. In this context, the design of the Industrial Park has considered the possible occurrence of earthquakes.

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