

# ENERSENSE ENERGY NAMIBIA (PTY) LTD

Environmental and Social Impact Assessment

Pilot Study for the Proposed Development of a Solar PV Power Plant and Agricultural Activities, for the Production of Green Hydrogen and Green Anhydrous Ammonia Facilities

Daures Constituency, Erongo Region, Namibia

November 2022







#### **CONSULTANT'S EXPERTISE**

I.N.K Enviro Consultants cc is the independent firm of environmental consultants that has been appointed by Enersense Energy Namibia (Pty) Ltd to conduct the ESIA process.

Immanuel N. Katali, the Environmental Specialist holds a B.Arts (Honors) Geography, Environmental Studies and Sociology and has over seven years of relevant experience in conducting/managing Environmental Impact Assessments (EIAs), Social Impact Assessments (SIA), compiling Environmental and Social Management Plans (ESMPs) and Environmental Compliance/Monitoring Audits in Namibia. Immanuel is certified as an environmental practitioner under the Environmental Assessment Professionals Association of Namibia (EAPAN).

#### DECLARATION OF INDEPENDENCE AND DISCLAIMER

The environmental consultant herewith declare that this report represents an independent assessment of the proposed Daures Green Hydrogen Project, on the request of Enersense Energy Namibia (Pty) Ltd.

I.N.K Enviro Consultants cc has prepared this report based on an agreed scope of work and acts in all professional manner as an independent environmental consultant to Enersense Energy Namibia (Pty) Ltd and exercises all reasonable skill and care in the provision of its environmental professional services in a manner consistent with the level of expertise exercised by members of the environmental profession.

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# **1** INTRODUCTION

#### 1.1 Introduction to the Proposed Project

Enersense Energy Namibia (Pty) Ltd (hereinafter referred to as "Enersense") intends on obtaining an Environmental Clearance Certificate (ECC), to conduct a feasibility investigation and pilot study for their proposed long-term development of Africa's first Green Hydrogen Village, that aims to operate on a semi-industrial scale. The project will be based in the Daures Constituency, Erongo Region (refer to Figure 1), on an allocated piece of land measuring 15 000 hectares (ha), to be utilized in a phased approach as follows:

- Phase one (1) and two (2): Focusing on short term viability, demonstration use cases and proof
  of concept of production of Green Hydrogen and Green Ammonia as an efficient and widely used
  source of nitrogen fertilizer in agricultural green schemes. The source of power for these
  activities to be generated from a proposed 1.5 MW Solar PV Power Plant. These phases will also
  evidence hydrogen and ammonia based technologies. The current ESIA only assesses the
  activities in this phases.
- Phase three (3) and four (4): Focusing on industrial level production for local and international consumption. These phases include the generation of on-grid electricity from wind turbines and the expansion of the Solar PV Power Plant and its associated infrastructure (transmission lines). A separate ESIA process will be initiated in the future for this phase, which includes the wind component and expansion of the Solar PV Power Plant PV Power Plant and subject to a 12 month bird monitoring campaign.

In light of the above, the proposed pilot project is made up of the following components:

- Solar PV Power Plant for off-grid power generation (phase 1 and 2 pilot study) covering 1.5 ha.
- Green Scheme Agricultural Production Facility covering 3 ha.
- Green Hydrogen and Green Ammonia Production Facility covering 1 ha.
- A Wind Mast Campaign (establishment of two (2) wind masts.
- Housing, Eco-lodge, Warehousing, Training and Research Facilities covering 1 ha.
- Supporting Infrastructure (fencing etc.).



This ESIA only assesses the activities associated to the Green Scheme Agricultural Production and the Solar PV Power Plant for the generation of off-grid electricity as a source of renewable energy for the production of green hydrogen and green ammonia. The construction of these infrastructure will cover a total land area of 6.5 ha on an allocated 30 ha pilot study area, located on the north-western boundary of the the overall 15 000 ha site. Additionally, it assesses a proposed wind mast campaign that will measure the wind speed in the area, as part of a preliminary wind assessment that is required for the future development of a wind farm on the remaining 14 970 ha land. A separate ESIA process for the wind farm on the remaining 14 970 ha and the generation of on-grid electricity and its associated infrastructure (transmission lines) will be initiated in the future and once project feasibility has been proven (refer to Figure 2). However, the remaining 14 970 ha has been considered in this ESIA to a certain extent, in order to get a general idea/outlook of the broader pilot study area and due to the positioning of the wind masts (which is included in this ESIA process) within the bigger area.

The objectives of the proposed project include the following:

- Sustainable production of green hydrogen and green ammonia from renewable resources.
- Local ESMPloyment
- Significant investment in the project area.
- Training and research opportunities for Namibia Green Hydrogen Research Institute (NGHRI) and the University of Namibia (UNAM) Students in partnership with the University of Stuttgart.
- Local community partnership and green scheme agricultural production.
- Demonstration of green hydrogen and green ammonia applications.
- Enablement of green hydrogen economy.
- Unlock the full energy potential of the area estimated to generate electricity up to 2 Gigawatt (GW).

Uis, as the nearest settlement to the proposed project, provides significant opportunities for green hydrogen and green ammonia use due to the presence of the Uis Tin Mine, therefore, providing a potential commercial aspect and mining-industry decarbonization use case.



Prior to commencement of any construction activities relating to the proposed project, an Environmental Clearance Certificate (ECC) is required on the basis of an approved Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP). It is with this background that, I.N.K Enviro Consultants cc (I.N.K), an independent firm of consultants, that was appointed to undertake the Environmental and Social Impact Assessment process for this project. More details regarding the ESIA process that was followed is presented in Section 1.4.







Figure 1: Daures Green Hydrogen Village Locality Map





Figure 2: Project Site Layout



# 1.2 Details of the persons who compiled this ESMP

I.N.K Enviro Consultants cc is the independent firm of consultants that has been appointed by the Enersense to undertake the Environmental and Social Impact Assessment and related processes. The full ESIA team comprises of various environmental experts and specialists as per the following table below.

# Table 1: ESIA Team

Specialist	Role/Position	Company
Mr. Immanuel N. Katali	<ul> <li>Lead ESIA Practitioner</li> <li>Socio-Economic Specialist</li> </ul>	I.N.K Enviro Consultants cc
Mr. Titus Shuuya	Ecologist (Fauna/AviFauna/Flora)	Excel Dynamic Solutions (Pty) Ltd
Mr. Roland Mushi	Archaeologist	Excel Dynamic Solutions (Pty) Ltd
Mr. Sakaria Nalusha	Groundwater Specialist	Green Team Consultants cc
Mr. Johann Venter	Risk Specialist	Freelance

#### 1.3 Scope of ESMP

The components of the ESMP are included in Table 1: Content of the EMP below.

# Table 2: Content of the ESMP

EIA Regulation requirement	EMP Reference
Details of the persons who prepared the EMP and the expertise of those persons to prepare an environmental management plan.	Section 1.2
Information on any proposed management or mitigation measures to address the environmental impacts that have been identified in a report contemplated by these regulations, including environmental impacts or objectives in respect of –	Section 2
Planning and design	
Construction activities	
Operation or undertaking of the activity	



EIA Regulation requirement	EMP Reference
Rehabilitation of the environment	
An identification of the persons to be responsible for the implementation of the mitigation measures.	Sections 3
Proposed mechanisms for monitoring compliance with the EMP and reporting on it.	Section 3 & 4





# 2 ENVIRONMENTAL AND SOCIAL ACTION PLANS

The management measures proposed to mitigate the potential impacts relating to the construction and operation phase are detailed in the action plans below.

#### 2.1 Action plans to achieve objectives and goals

Action plans to achieve relevant objectives/goals are listed in tabular format.

#### Table 3: Action Plan – Stakeholder Consultation/Communication Management Plan

Objective:

To ensure that regular communication is provided on the relevant activities, together with feedback on the environmental management performance of the beach facility and that opportunity is provided for interested and affected parties to continue to raise comments and concerns (complaints).

No	Issue	Management commitment
		These commitments apply to <u>all phases</u> of the project
1	Understanding who the	Maintain and update the Daures Green Hydrogen stakeholder register. Ensure that all relevant stakeholder groups are included.
2	stakeholders are	A representative database would include government, employees, service providers, contractors, local communities, NGOs and the media.
3	Liaison with interested and affected parties	Devise and implement a stakeholder communication and engagement strategy. Quarterly meetings with the immediate neighbouring communities will be carried out.
4	Cooperative	Keep identified stakeholders informed about the project activities.
5	working relationship with stakeholders	Use appropriate communication channels to consult with, and disseminate information to, the identified stakeholder groups.
6	Managing perceptions, issues and/or complaints	<ul> <li>Develop and implement a concerns/complaints (grievance) process for stakeholders and publicise the channels through which issues can be submitted to the Project Developer.</li> <li>Document all complaints in an external communications register;</li> <li>Respond immediately to acknowledge receipt of complaints and comments;</li> <li>Investigate and report on findings of issue to the complainant;</li> <li>Keep complete auditable records of complaints, responses and actions taken; and</li> <li>Introduce an independent mediator if the grievance / complaint cannot be resolved between the municipality and the affected party.</li> </ul>



#### Table 4: Action Plan – Air Quality Management Plan

#### **Objective:**

The objective of the management measures is to prevent unacceptable air quality related pollution impacts.

No	Issue	Management commitment
		These commitments apply to the <u>construction</u> phase
1	Dust, PM <sub>10</sub>	Demarcate/fence off construction activities.
2	and other	Keep construction footprint to a minimum.
3	emissions	Ensure all construction equipment is subject to an Inspection & Maintenance programme to ensure proper combustion.
4		Should excessive dust be generated by construction activities then dust suppression should be considered.
These commitments apply to the <u>operations</u> phase		
5	Dust, PM <sub>10</sub> and other gaseous emissions	Develop and implement a complaints register to record any 3rd party complaints relating to the release of dust from exposed areas. Complaints must be investigated and actions developed.

# Table 5: Action Plan – Noise Management Plan

#### **Objective:**

The objective of the management measures is to limit excessive noise.

No	Issue	Management commitment		
	These commitments apply to <u>all phases</u> of the project			
1	Noise pollution	Noise-generating activities will be limited to daytime hours (between 08h00-20h00) since noise impacts are most significant during the night.		
2		The proponent will maintain good relations with the residents (Rhino Rest Camp) and have clear points of contact to enable a speedy response to complaints.		
3		<ul> <li>Ensure general construction activities follow good engineering practice including:</li> <li>Enclosure of major sources of noise.</li> <li>Following of good design philosophies for vibrating structures that are known to be noisy.</li> </ul>		
4		Ensure control measures are enforced on site to regulate the visitors from creating		



No	Issue	Management commitment
		excessive noise that could be a nuisance to the residents
5		Minimise individual vehicle engine, transmission and body noise or vibration through the implementation of an equipment maintenance programme and minimise the need for trucks or equipment to reverse during construction.
6		When complaints are received of excessive noise, a noise monitoring campaign needs to be conducted to investigate and develop further mitigation, as required.

# Table 6: Action Plan – Visual Disturbance and Sense of Place Management Plan

#### **Objective:**

The objective of the management measures is to limit visual impacts.

No	Issue	Management commitment		
	These commitments apply to <u>all phases</u> of the project			
1	Visual disturbance	No litter or waste accumulation will be permitted on site.		
2		Ensuring that the operations and facilities are well maintained and kept in good order. Poor maintenance and housekeeping would result in the creation of a negative visual impact.		
3		Plant trees around the infrastructure in order to beautify the place, as well as a way of screening the negative visual impact of the buildings.		
4		Limit the heights of the buildings as much as possible		
5		Ensure the paint of the buildings such as toilets are of a natural colour and not bright colours which are commonly seen as unattractive colours in the natural environment.		
6		Ensuring that the operations and facilities are well maintained and kept in good order. Poor maintenance and housekeeping would result in the creation of a negative visual impact.		
7		Plant trees around the infrastructure in order to beautify the place, as well as a way of screening the negative visual impact of the buildings.		



#### Table 7: Action Plan – Archaeology Management Plan

# **Objective:**

To ensure that the correct actions are taken to preserve or document chance archaeological finds.



No	Issue	Management commitment
		<ul> <li>A landscape approach of the site management must consider culture and heritage features in the overall planning of development infrastructures within and beyond the licenses' / project boundaries;</li> </ul>
		• Subject to the recommendations herein made and the implementation of the mitigation measures, adoption of the project HMP/ESMP should be complied.
		<ul> <li>An archaeologist, Heritage specialist or a trained Site manager should be on-site to monitor all significant earth moving activities that may be implemented as part of the proposed project activities.</li> </ul>
		• When there is removal of topsoil and subsoil on the site for development purposes, the site should be monitored for subsurface archaeological materials by a qualified Archaeologist or Site manager.
		• Show overall commitment and compliance by adapting "minimalistic or zero damage approach" throughout the development activities.
		• In addition to these recommendations above, there should be a controlled movement of the people i.e. a contractor, equipments, setting up of camps and everyone else involved in the proposed development activities. This is recommended to limit the proliferation of informal pathways, gully erosion and disturbance to surface and sub-surface artifacts such as stone tools and other buried materials, etc.
		• There should be a controlled movements of heavy loads such as abnormal vehicles and kinds of heavy duty machineries within the project boundaries. This means avoiding chances of crossing paths that may lead to the destruction of on and sub-surface archaeological materials
		<ul> <li>It is essential that cognizance be taken of the larger historical landscape of the area to avoid the destruction of previously undetected heritage sites. Should any previously undetected heritage or archaeological resources be exposed or uncovered during development phases of the proposed project, these should immediately be reported to the heritage specialist or heritage authority (National Heritage Council of Namibia).</li> </ul>
		• The Proponent and Contractors should adhere to the provisions of Section 55 of the National Heritage Act in event significant heritage and culture features are discovered in the course of developmental works.
		<ul> <li>Whoever is going to be in charge of mitigation and monitoring measures should have the authority to stop any construction activities that is in contravention with the National Heritage Act of 2004 and National Heritage Guidelines as well as the overall project ESMP.</li> </ul>



No	Issue	Management commitment
2	Training	All workers (temporary and permanent) should be given training on the chance find procedure.

#### Table 8: Action Plan – Social and Economic Management Plan

#### **Objective:**

The objective of the management measures is to enhance the positive impacts associated with job creation and investment.

No	Issue	Management commitment
	Th	ese commitments apply to <u>all phases</u> of the project
1	Enhance positive socio- economic impacts	Local people must be preferentially selected to encourage social growth and development in the region and Namibia as a country.
		Management is urged to begin local selection and provide technical training as soon as possible to enable local people to compete for the lower skilled jobs and upskill themselves in anticipation of the proposed project.
2	Employees/Contractors (Social issues)	Have zero tolerance to alcohol in the workplace.
3		A First Aid Kit should be available at all times during the construction process.

## Table 9: Action Plan – Waste Management Plan

#### **Objective:**

The objective of the management measure is to appropriately manage general waste.

No	Issue	Management commitment
		These commitments apply to <u>all phases</u> of the project
1	Waste Management	Workers should be sensitized to dispose of waste responsibly and not to litter;
2		Ensure suitable receptacles with lids for waste disposal is available on site at all times.



No	Issue	Management commitment
3		Ensure animals do not have access to waste bins.
4		If rubbish containers are used, ensure these can be sealed from animals or strong wind and during transportation. Appropriate jackal-proof waste bins shall be placed at designated places.
5		All domestic and general operations waste produced daily should be contained until such that time it will be transported to the approved designated waste facilities;
6		No disposal of waste on site and no burning of waste.
7		If applicable, hazardous waste should be properly handled, stored and disposed of at the nearest authorized waste sites;

# Table 10: Action Plan – Hydrocarbons and Associated Spills Management

#### **Objective:**

The objective of the management measure is to appropriately manage hydrocarbon spills.

No	Issue	Management commitment
		These commitments apply to the construction phase
1	Hydrocarbon Spills	Vehicles, machinery and equipment shall be kept in good working condition to ensure they do not leak oil/diesel.
2	Management	Vehicles and machinery will be serviced off site as far as possible. However, in the event where machinery needs to be repaired/serviced on site all care shall be taken to prevent spillage of oil/diesel by performing the work on impermeable surfaces or proper placement of drip trays.
3		Regular environmental awareness should include potential risks associated with hydrocarbons.
4		All refuelling of vehicles will take place off site
5		Establish and maintain impermeable bunded / drip trays around diesel generators.
6		Regular environmental awareness should include potential risks associated with hydrocarbons.
7		Any spills will be contained and cleaned up immediately
8		Spill kits will be readily available on site. Employees and/or contractors will be shown how to use the spill kits to enable containment and remediation of pollution incidents.
9		The contractor will establish environmental awareness to employees
10		Soil contaminated with hydrocarbons shall be excavated and stored in plastic bags inside a designated wheelie bin and transported for disposal at the nearest disposal facilities in the



No	Issue	Management commitment
		towns.

#### Table 11: Action Plan – Groundwater Management

#### **Objective:**

The objective of the management measure is to appropriately managegroundwater impacts.

No	Issue	Management commitment
		These commitments apply to the construction phase
1	Groundwater Impact	<ul> <li>It is therefore highly, highly recommended that the borehole be drilled under supervision of a qualified and experienced hydrologist/geologist to carefully study lithological logs, fracture patterns, water strikes zones and recommend termination depths based on field observations.</li> </ul>
		<ul> <li>The borehole must be sufficiently developed to remove all the chemicals which might have been used or produced during the drilling process.</li> </ul>
		• The borehole must be cased (and screened to at least 1/3 of casings length targeting the water strike zones) to increase the life of the borehole.
		• A pumping test, comprised of step drawdown test (SDT) and a constant discharge test (CDT), must be performed to evaluate the sustainable abstraction rate. The SDT should consist of at least four steps of one hour to two hours each and the CDT should be at least 48hours long. Each pumping should be followed by recovery test lasting for as long as the duration of the preceding pumping or until at least 95% of the total drawdown has been recovered, whichever comes first.
		• A water sample should be collected at the end of the CDT and sent to the laboratory for chemical analysis to determine the water quality and hence the suitability for the proposed development.

#### Table 12: Action Plan – Health and Safety Management

#### **Objective:**

The objective of the management measure is to appropriately managehealth and safety impacts.

**Management commitment** 



No	Issue	Management commitment
		These commitments apply to the construction and operation phase
1	Health and Safety Impact	<ul> <li>The site should be equipped with a security-appropriate fence and control gate, once in operation. This is to limit restrict access to wildlife and authorised personnel only;</li> </ul>
		<ul> <li>As part of their induction, the workers should be provided with awareness training on the risks of mishandling equipment and materials – including the risk of human-wildlife conflict on site;</li> </ul>
		<ul> <li>When working on-site, Employees should be properly equipped with personal protective equipment relevant to the type of work they are involved in;</li> </ul>
		<ul> <li>No Employee should be allowed to drink alcohol before and during and/or under the influence of drugs while on duty;</li> <li>There should be a safety officer on-site and the first aider with sufficient first-aid equipment.</li> </ul>

# Table 13: Action Plan – Biodiversity Management

# <u>Objective:</u>

The objective of the management measure is to appropriately managebiodiversity impacts.

No	Issue	Management commitment
		These commitments apply to the construction and operation phase
1	Groundwater Impact	<ul> <li>It is recommended that vegetation that is not directly affected by the development must not be cleared and their habitats should be avoided as practical as possible;</li> <li>It is also advisable that all the matured and well-established trees should not be cleared, since most of them grow slow to establish due to the climatic condition;</li> <li>Avoid sensitive sites such as rocky outcrops, hilltops, gorge, drainage lines and valleys to enable biodiversity conservation;</li> <li>A greenhouse seedling plantation should be attempted with indigenous trees to compensate for the flora species that were lost as a result of the proposed development;</li> <li>All the project personnel should attend the site induction before they start working, and they should have their identification card – induction should include the identification and importance of unique flora species;</li> <li>Develop a policy that limits independent movements of all workers into the veld or no-go area which could lead to illegally live and dead plants collection;</li> <li>Ensure that only the designated site access roads provided shall be used as practical as possible and no new tracks should be created inevitably;</li> <li>New access tracks or roads should be created around the sensitive flora species and</li> </ul>





No	Issue	Management commitment
		<ul> <li>habits.</li> <li>Avoid damaging or collecting protected endemics, rare and vulnerable flora – they should be identified and barricaded measures should be installed to protect them;</li> <li>Avoid driving vehicles within 2 meters of sensitive plants such as Welwitschias, because this practice will damage their sensitive hair roots and stress the plant which will threaten their survival.</li> <li>Sensitive sites must be identified, marked and avoided – and can be conserved into biodiversity hotspots – and also shall be marked as no-go areas to limit the movements;</li> <li>Stakeholder engagement should be implemented throughout the proposed, especially with the surrounding landowners and other relevant stakeholders;</li> <li>A written agreement to access the property for the landowner should be in place before the work commences in their area;</li> <li>All complaints, including verbal, should be recorded into the complainant register and resolved within a reasonable time frame;</li> <li>All the project personnel should attend the site induction before they start working, and they should have their identification card;</li> <li>Develop a policy that limits independent movements of all workers into the veld that could create suspicion of poaching. Strictly prevent poaching, harvesting or possession of any such wildlife resources without an appropriate permit;</li> <li>Only use the designated site access roads provided shall be used as practical as possible and avoid creating new tracks or access roads unnecessary;</li> <li>Control traffic movement on site, deliveries and collection of goods and waste to and free the site induction of goods and waste to and free the site he site induction of goods and waste to and free the site induction of goods and waste to and free the site induction of goods and waste to and free the site induction free merging metates and provide shall be used as practical as possible and avoid creating new tracks or access roads unnecessary;</li> </ul>
		from the site, for example, movement can be restricted during weekdays between the hours of 08h00 and 17h00.

#### Table 11: Action Plan – Rehabilitation

# **Objective:**

The objective of the measures is to rehabilitate the construction sites to as close an approximation of the pristine state as is technically, financially and reasonably possible.

No	Issue	Management commitment
		These commitments apply to the construction phase
1	Rehabilitation	All construction sites should be photographed (1) before commencement, (2) after completion and (3) after rehabilitation of the activities.
2		All unused equipment and material will be removed from all sites;
3		All litter from the construction sites will be taken to an appropriate disposal site.
4		All debris, scrap metal, etc. will be removed.
6		All small ditches/ trenches will be covered and contoured.



No	Issue	Management commitment
5		Impacted footprints outside the site are to be raked
6		Inspect to ensure rehabilitation measures are implemented





# **3** PARTIES RESPONSIBLE FOR THE IMPLEMENTATION OF THE ESMP

This section describes the roles and responsibilities for implementing the different parts of the environmental management plan (ESMP).

# 3.1 Supervisor

The Supervisor has overall responsibility for environmental management and safety during the operation process of the Daures Green Hydrogen and shall oversee the implementation of the ESMP.

The Supervisor's responsibilities relating to compliance with this ESMP:

- Regular inspections of compliance to this ESMP and any other relevant legal requirements.
- Regular correspondence with the DEA on environmental issues and incidents.
- Conduct environmental awareness training during induction training and on an ad hoc basis thereafter to all workers.
- Ensure compliance to all facility rules
- Ensure that staff is controlled through the implementation of appropriate security measures.
- Carefully manage the handling of hydrocarbon material.
- Monitor for excessive dust and noise levels and implement control measures if necessary.
- Report incidences to the DEA.
- Implement a waste management strategy.
- Monitoring and maintenance of equipment and machinery.
- Implement an environmental awareness plan.
- Implementation of first-aid procedures.

# 4 TRAINING AND AWARENESS

The purpose of the job specific environmental awareness training is to ensure that employees/all staff are equipped to implement the actions committed to in the ESMP. The staff involved in operations will receive training regarding the requirements of this ESMP.

Four main forms of training will be provided on the premises:

- Industrial facility induction
- Environmental management training general and targeted

The training will generally be prepared by the Supervisor (or the Environmental Representative).



The following will be done to ensure all employees, contractors, suppliers and visitors receive the appropriate training/awareness:

# 4.1 Environmental Induction

All new members of staff receive a corporate Environmental Induction along with the obligatory Health & Safety induction. The induction gives a general overview of the environmental challenges faced by the project, how we are managing them, and general tips for reducing our impact in the workplace.

The main reason for environmental induction is to encourage new staff to be environmentally aware right from the beginning of their employment. This will ensure that environmental initiatives are successful by eliminating bad habits from the start.

Before working at the facility, all personnel and sub-contractors will undertake a facility induction incorporating environmental requirements. The induction will address a range of environmental awareness issues specific to the construction process of the project.

As a minimum, training shall include:

- Explanation on the importance of complying with the ESMP and environmental implications should the ESMP not be effectively implemented.
- Explanation of the facility rules.
- Discussion of the potential environmental impacts of activities, recognition of environmental risks and how to control these risks.
- The benefits of improved personal performance, understanding of what to do in case of an environmental event or exposure.
- Employees' roles and responsibilities, including emergency preparedness.
- Explanation of the mitigation measures that must be implemented when carrying out operational activities.
- Explanation of the requirements of the ESMP and its specification.
- Explanation of the management structure of individuals responsible for matters pertaining to the ESMP.

# 4.2 Environmental Awareness training

Targeted environmental management training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact. This environmental training will aim to achieve a level of



awareness and competence appropriate to their assigned activities. This training will take place at the beginning of operations.



