SIMPLIFIED ENVIRONMENTAL IMPACT STATEMENT

CARRIER FUEL UNIPESSOAL LDA
CARUNGULAU, METIAUT, CRISTO REI, TIMOR LESTE

This Environmental Management Plan is prepared by Hersege Lda on behalf of Carrier Fuel Unip Lda. Hersege Lda is a national mining and environmental consulting company located in Dili. Comment, Suggestion and input for this SEIS report can be forwarded to hersegeconsultant10@gmail.com

APRIL 2021

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1. EXECUTIVE SUMMARY

The aim of this Simplified Environmental Impact Statement (SEIS) is to examine the negative effects on the environment that undertaken by the proposed activity. Environment is defined as the natural and physical environment and the relationship of people with that environment. This means that the "environment" considered in an SEIS includes land, water, air, structures, living organisms, environmental values at the site, and the social, cultural, and economic aspects. The SEIS process is an important planning tool for the project proponent as it will inform on significant project effects and clearly define mitigation measures to avoid adverse impacts. Early identification of possible impacts promotes environmental sustainability, as anthropogenic factors are balanced with natural environmental needs.

The fuel filling station will be located at Carungulau, Metiaut, Cristo Rei and Dili Municipality, The project area nearby national road is new business development proposed by Carrier Fuel Unip Lda, Company for the purpose of supplying and delivering fuel directly to end users. Total land occupied by the fuel storage and supporting facility is about 1,499 m2, in which the fuel station with supporting facility for operation will be constructed. The main components of fuel development project compose of;

a. Pump Station
b. Storage tank
c. Discharge Area
d. Discharge Box
e. Oil Catcher
f. Fire Fighting
g. Office
h. Minimarket

The existing environmental component in the project location has been identified and collected the basic information such as:

- ✓ Physical condition consists of climate, topography, geology, surface water, underground water, coastal water, marine water and soil. Also, conducted several initial measurement for Air Quality, and soil in the project location
- ✓ Ecological condition consists of wetland area, Mangroves, coral, fisheries, protected area and national parks, flora and fauna, forest costal resources and others industry.
- ✓ Economic Component consists of employment sector, infrastructure facilities, Land use, use of forest and natural resources, fishing, agriculture and tourism

- ✓ Social components consists of Population and communities, health profiles of community, institution facilities, community and family structure, and land ownership Cultural Components Consist of cultural heritage, archeological site, sacred site, historical site, and unique landscape The potential environmental impacts during the pre-construction phase are community conflict on land status, disturbance on wild life habitats, negative perspective on community, unfair compensation, outside worker influx, and spread of diseases. Air and noise pollution, water and soil contamination, oil spills and leak, traffic management, workers and public health and safety are the identified environmental impacts during construction phase, operation and decommissioning phase to be concerned.

The Project has been classified as Category B by the *Autoridade Nasional Petrolium e Minerais* (ANPM) on 6 January 2021 (Letter ref. ANPM/DS/S/20/004). According to Timor-Leste law the project can be classified as Category B however the classification is based on the nature, size (Annex II), technical characteristic of the project as based on Decree-Law No. 5/2011, on Environmental License. Category B project to include projects that potentially cause environmental impacts and are subject to the procedure of Simplified Environmental Impact Statement (SEIS) developed based on the EMP in accordance with the Decree Law No. 5/2011.

The proposed project location close to tourism area and protected area the proponent considered these impacts during pre-construction, construction, operation and decommissioning phase within provides the environment management plan.

Potential impacts during pre-construction and construction period there are several vegetation's that will be removed, Increase air pollution , increase of noise level, Health & safety at work, Increasing of waste, Health and safety at work, Jobs Opportunities. Potential impacts during operation, maintenance and decommissioning phase soil contamination, increasing of waste (solid and liquid) Groundwater contamination may occur however all potential impacts will be prevented by proponent according to the mitigation measures in the Environmental Management Plan (EMP) document.

2. DETAILS OF PROJECT PROPONENT

The proposed project is an automotive fuel filling station, called Carrier Fuel Unip Lda which located at Carungulau, Metiaut, Post Administrative Cristo Rei, Dili, and Timor-Leste. It occupies a total land of approximately 1,499 m2, where the fuel station and its supporting facilities are built.

The contact detail of the project proponent and the principal contact is provided below.

OPERATOR	: Carrier Fuel Unipessoal Lda
Address	: Comoro, Bebonuk, Dom Aleixo, Dili
Contact Person	: Adolfo Antonio Belo
Mobile	: (+670) 77285568 / 73392089
E-mail	: countryfuell@gmail.com

3. DETAILS OF CONSULTANT WHO PREPARED SEIS

Consultant Name	:	HERSEGE LDA
Consultant TIN	:	12299016
Registered Address	:	Rua Taibessi, Alcrin, Lahane Oriental, Nain Feto, Dili
Telephone No. E-	:	(+670) 77522363 / 76717048 / 76641553
Email Address Type	:	hersegeconsultant10@gmail.com
of Company Status	:	Private Limited
of Company Place	:	Local Timorese
of Incorporation	:	Dili, Timor Leste
Date of Incorporation	:	13 July 2018

Experiences

Hersege Lda has involved in preparing Environmental Impact Assessment in several activities since it was established and has a qualified and experiences members in Environmental Engineering, Geological Engineering, Mining Engineering and Instrumentation Engineering (Oil and Gas Operation). Following are the experiences of the consultant and it member's qualification:

Table 1. Experiences of the Hersege Lda Consultant

NO	COMPANY	TYPE OF SERVICES	PROJECT ACTVITIES	PROJECT LOCATION	STATUS
1	Nananiu Unip. Lda	Mining And Environmental License	River Sand Mining	Matai, Suai	On Process
2	China Wu Yi Co.,Ltd	Mining And Environmental License	Quarry And River Sand Mining	Ulmera, Liquica	On Process
3	Montana Diak Unip Lda	Mining And Environmental License	River Sand Mining,	Hera, Dili	On Process
4	Jucostim Lda	Mining License	Quarry and River Sand Mining	Dato, Liquisa	On Process
5	Xirevo Unip Lda	Mining And Environmental License	Quarry and River Sand Mining	Dili, Liquica	On Process
6	Borala Lda	Environmental License	Fuel Filling Station	Dili, Viqueque	**COMPLETED**
7	Green Diamond Unip Lda	Environmental License	Fuel Filling Station	Oe-cussi	**COMPLETED**
8	Jesoria Unip Lda	Environmental License	Fuel Filling Station	Viqueque	**COMPLETED**
9	Tatoli Fuel Lda	Environmental License	Fuel Filling Station	Lospalos	**COMPLETED**
10	Queybubun Laco Conbustivel Lda	Environmental License	Fuel Filling Station	Maliana	**COMPLETED**
11	AdyPay Lda	Environmental License	Fuel Filling Station	Ossu	**COMPLETED**
12	Mekar Fuel Lda	Environmental License	Fuel Filling Station	Lurumata, Dili	**COMPLETED**
13	Nusabe III Unip Lda	Environmental License	Fuel Filling Station	Aileu	**COMPLETED**
14	Ergin Fuel	Environmental License	Fuel Filling Station	Metinaro	**COMPLETED**
15	Mega Petroleum	Environmental License	Fuel Filling Station	Fatuhada, Dili	**COMPLETED**
16	Super Fuel	Environmental License	Fuel Filling Station	Kuluhun, Dili	**COMPLETED**
17	Titer Unip Lda	Environmental License	Fuel Filling Station	Losaplos	**COMPLETED**
18	Klean Gas Lda	Environmental License	Retail Gas Station	Dili	On Process
19	Abom Kase Fuel	Environmental License	Fuel Filling Station	Maliana	**COMPLETED**
20	GSGP Petrol Station	Environmental License	Fuel Filling Station	Ainaro	**COMPLETED**
21	Vida Diak Petroleo	Environmental License	Fuel Filling Station	Aipelu	**COMPLETED**
22	Xalila Fuel	Environmental License	Fuel Filling Station	Dili	**COMPLETED**
23	Divita Fuel Unip Lda	Environmental License	Fuel Filling Station	Tibar	**COMPLETED**
24	Ai-dalau Furak Unip Lda	Environmental License	Fuel Filling Station	Same	**COMPLETED**
25	ETO Lda	Environmental License	Fuel Filling Station	Mandarin, Balide and Manatuto	**COMPLETED**
26	Global	Environmental License	Fuel Filling Station	Laga	On Process

Qualification and Experiences of each member

- ✓ **Herculano Ivo. L. Granadeiro** is Mining Engineer with 5 years of experiences in preparing the mining license activities and Environmental Impact Assessment for fuel filling stations and mining activities for obtaining the Environmental License.
- ✓ **Geovanio Alves,** is Geological Engineer with 4 years of experiences in preparing the mining license activities and Environmental Impact Assessment for fuel filling stations and mining activities for obtaining the Environmental License. During the study in Indonesia, Geovanio has done several geological surveys for mineral in Kalimantan, Papua, Halmahera and Sumatera.
- ✓ **Sergio Valdano Pinto** is a Mining Engineer and has diploma of engineering in instrumentation (oil and gas operation), with 5 years of experiences in preparing the mining license activities and Environmental Impact Assessment for fuel filling stations, mining activities and involved in preparation of EIA for China Harbour Timor Temporary Jetty in Mota Ikun for obtaining the Environmental License. Also, Sergio has attended training for Oil and Gas Safety Passport and a safety briefing in Petronas Chemical Methanol Labuan, Malaysia.
- ✓ **Patricio de Oliveira Ximenes** is Environmental Engineer with 4 year of experiences in preparing the mining license activities and Environmental Impact Assessment for fuel filling stations and mining activities for obtaining the Environmental License and as an environmental officer in China Wu Yi, Co.,Ltd
- ✓ **Sergio Martires,** is Mining Engineer with 3 year of experiences in preparing the mining license activities and Environmental Impact Assessment for fuel filling stations and mining activities for obtaining the Environmental License

4. DESCRIPTION OF THE PROJECT

The Carrier Fuel Unip Lda is located at Aldeia Carungulau, Suku Metiaut, Cristo Rei and the geographic coordinates are 8°32'24"S Latitude and 125°36'47"E Longitude. It is an automotive fuel filling station that supplies gasoline and diesel fuel to the customers. Carrier Fuel occupies a total land of approximately 1,499 m2 where the facility's components such as underground storage tanks with capacity of 15,000 L for each fuel products such as gasoline and diesel; two fuel dispensers where each of the dispensers has two nozzles, a simple canopy, minimarket and a supporting office are available.

The main activities during the operational stage of Carrier Fuel Unip Lda include tanker unloading, storage of fuel on site, dispensing fuel into vehicles' tankers, carrying repair or maintenance, and ensure fire safety during the operation. The fuel filling station operates from seven days in a week, Monday to Sunday from six in the morning till eight at night. It consists of two shifts that are attended by staffs/pump attendants for each shift.

The following map shows the respective features of the existing land pattern around the fuel filling station. There are small businesses and shops located in front of the fuel filling station, and other important existing features, such as the Public School, Public Clinic and others government institution office, (refer to the following map).

a. Identification of the Project

The fuel filling station will be located at Carungulau, Metiaut, Cristo Rei and Dili Municipality, The project area nearby national road is new business development proposed by Carrier Fuel Unip Lda, Company for the purpose of supplying and delivering fuel directly to end users. The geographic coordinates of the location is 8 32‟24" S (Latitude) and 125 36‟47" E (Longitude). Total land occupied by the fuel storage and supporting facility is about 1,499 m2, in which the fuel station with supporting facility for operation will be constructed shown in Figure 1.

Figure 1. Proposed Location Map

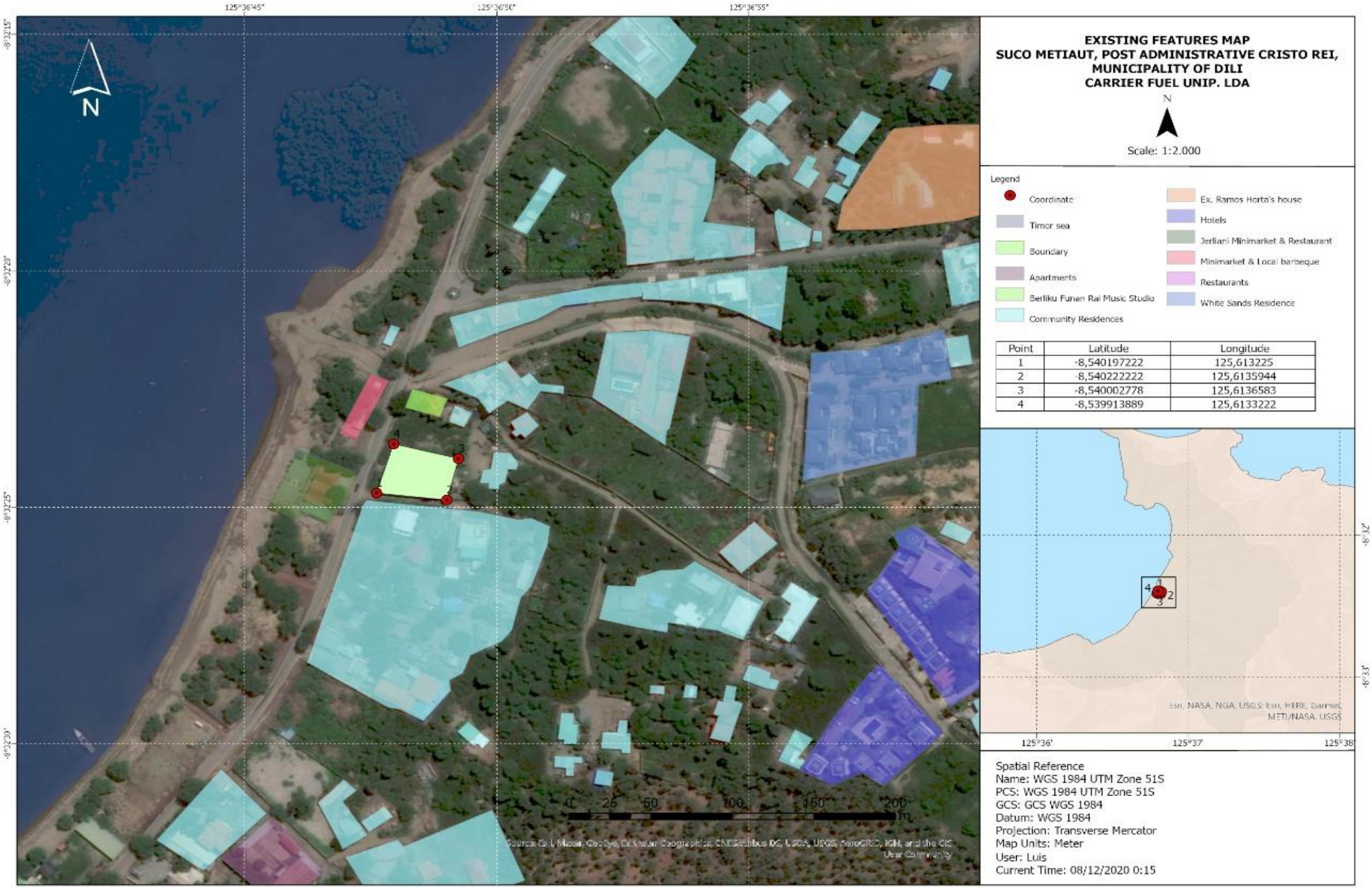


Figure 2. General Area Map

b. Category of the Project

In accordance to the definition of the project category set out in article 4 of the Decree Law no.5/2011 Environmental Licensing and Annexes 1 and 2 of the law, this project (Fuel Station and Storage) is defined as a category (B). The fuel station project components fall into the Petroleum Industry Sector (Storage sites for Oil / Natural Gas / Petrochemicals or Chemicals) and due to the environmental impact may occur during the activities.

c. Brief description of the Nature, size and Location of the Project

The Carrier Fuel is located at Aldeia Carungulau, Suku Metiaut, Cristo Rei and the Geographic coordinates are 8°32'24"S Latitude and 125°36'47"E Longitude. It is an automotive fuel filling station that supplies gasoline and diesel fuel to the customers. Carrier Fuel occupies a total land of approximately 1,499 m^2 where the facility's components such as underground storage tanks with capacity of 15,000 L for each fuel products such as gasoline and diesel; and two fuel dispensers where each of the dispensers has four nozzles, a simple canopy, minimarket and a supporting office are available.

The main activities during the operational stage of Carrier Fuel include tanker unloading, storage of fuels on site, dispensing fuel into vehicles' tank, carrying repair or maintenance, and ensure fire safety during the operation. The fuel filling station operates from seven days in a week, Monday to Sunday from six in the morning till eight at night. It consists of two shifts that are attended by eight staffs/pump attendants for each shift.

Inter-Municipality and intra-Municipality public and private transportation are serviced by Motor bikes, Buses and others public transportation. This existing road is the main road that connects to Areia Branca Beach (Tourism Area) and heading to Suco Hera, Post Administrative Cristo Rei, Municipality Dili. The access road to the proposed project is good condition.

Areia Branca Beach, Dolok Oan Beach and Cristo Rei Statue has the country's bigest Tourism Area in Timor Leste and to whole of other nation were there, as currently; Dili's capital of Timor Leste, most of population of Dili, and some of population from other District were to the Areia Branca Beach, Dolok Oan and Cristo Rei for Weekend recreation or holidays time.

The proposed location is Government land, in the Northern part of the project the proposed project is bordered with Public Road, Eastern Part is Berliku Fanun Rai Music Studio's, Western part is bordered with community residence and Southern is bordered with communities residence.

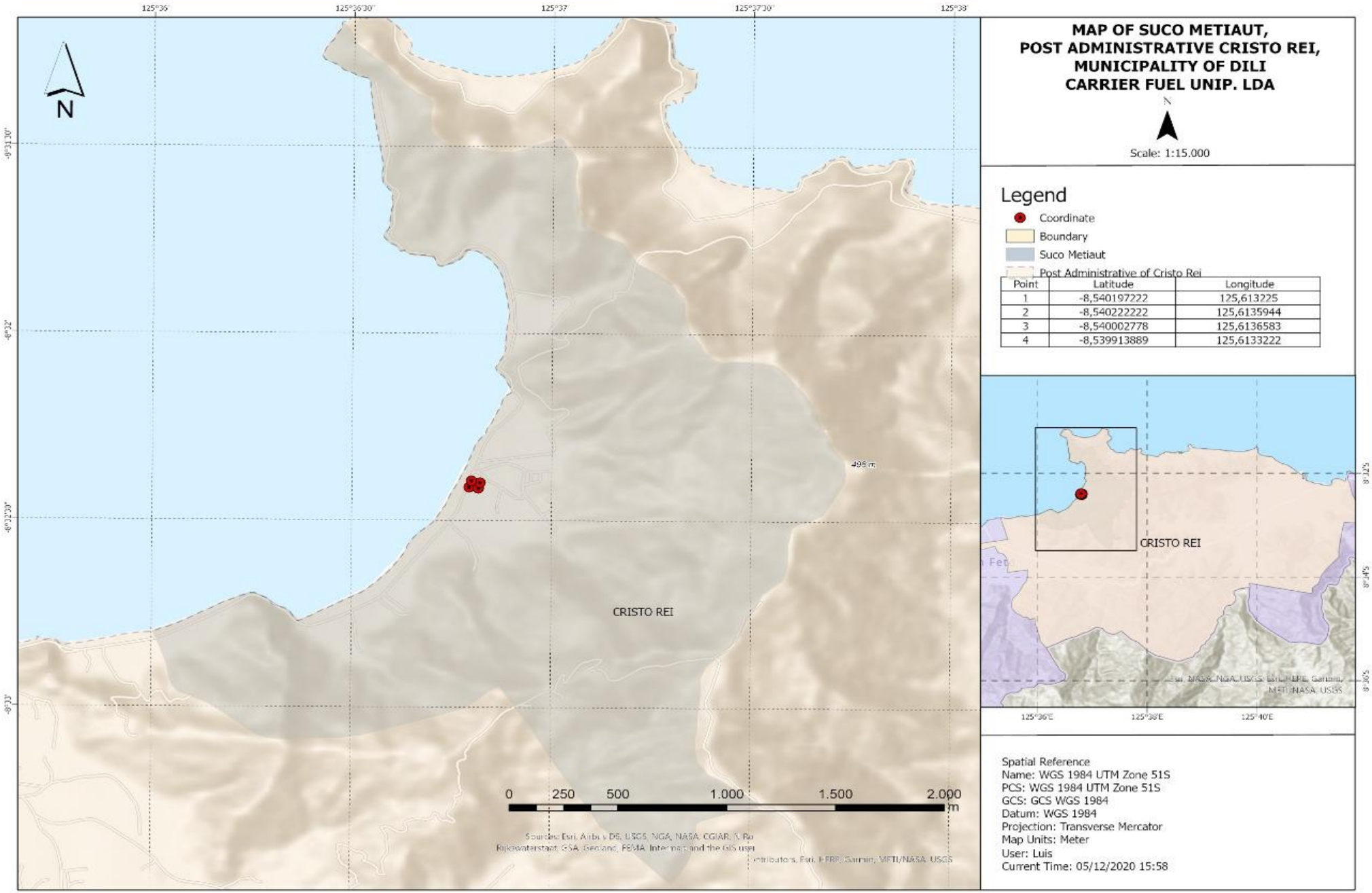
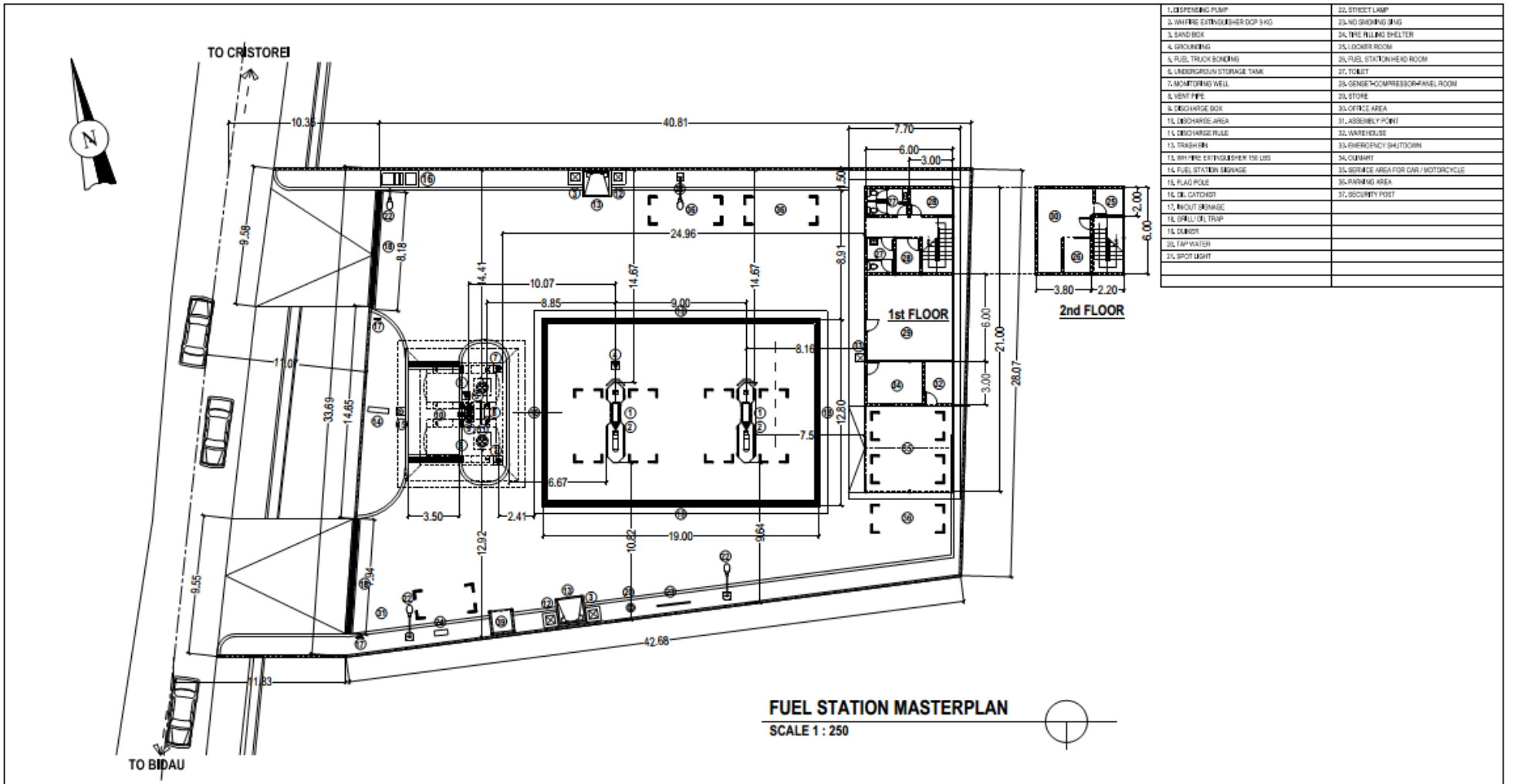


Figure 3. Suco Map



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TECHNICAL & HSSE DEPARTMENT PERTAMINA INTERNATIONAL TIMOR,SA	CARRIER FUEL	CARRIER FUEL FUEL STATION	MASTERPLAN		1 : 250	CHECKED BY	APPROVED BY	
		PROJECT LOCATION	DRAWN BY	CHECKED BY	DRAWING NO			
		METIAUT, DILI TIMOR - LESTE	FADLI ILAHI DATE:	RASID ABUDARIM DATE:	MP-01	CESALTINO BABO Downstream Project & Facility Appraisal DATE:	JUVENCIA MJDD COSTA Downstream Manager DATE:	

Figure 4. Site Layout Plan

- **Underground Tank**

The proposed storage of fuel on site consists of two underground storage tanks. The tanks can withstand a volume of 15,000 liters each. The indicated underground storage tanks will supply; diesel, Gasoline. The underground storage tanks are going to be installed as shown in the 'Underground Tank Cross-Section', as outlined in the 'Guidance for the Design, Construction, Modification and Maintenance of Fuel Filling Stations'. The bottom structure of the tank is going to be constructed from a 7-10 mm of asphalt coating and 500 mm of compacted fine sand. The underground tank is going to be anchored to ground with straps that are non-corrosive, and must offer good strength to hold the tank firmly. Proper care must be taken to ensure that the excavation does not collapse. Once the underground tank is in place, it is important that the gap between the wall and the tank shall be filled with the appropriate backfill up to the neck of the tank. The interstitial space is going to be continuously monitored by means of a leak detection system being of Class 2 system. Furthermore, tanks constructed from metal steel must be coated for the protection from corrosion. Such coating must be tested from the supplier according to the listed standard by ANPM.

The tanks are manufactured from coated steel. These are called composite tanks. The manhole section is fitted with a overfill protection device and self-contained manhole which is impervious to hydrocarbon and is sealed to prevent contamination to the surrounding environment. The materials used to make the tanks are corrosive free metals. A documented leak monitoring system will be put in place. All the installation and operation of fuel filling station should rely on Regulation No. 3 /2014 on Installation and Operation of Fuel Filling Station.

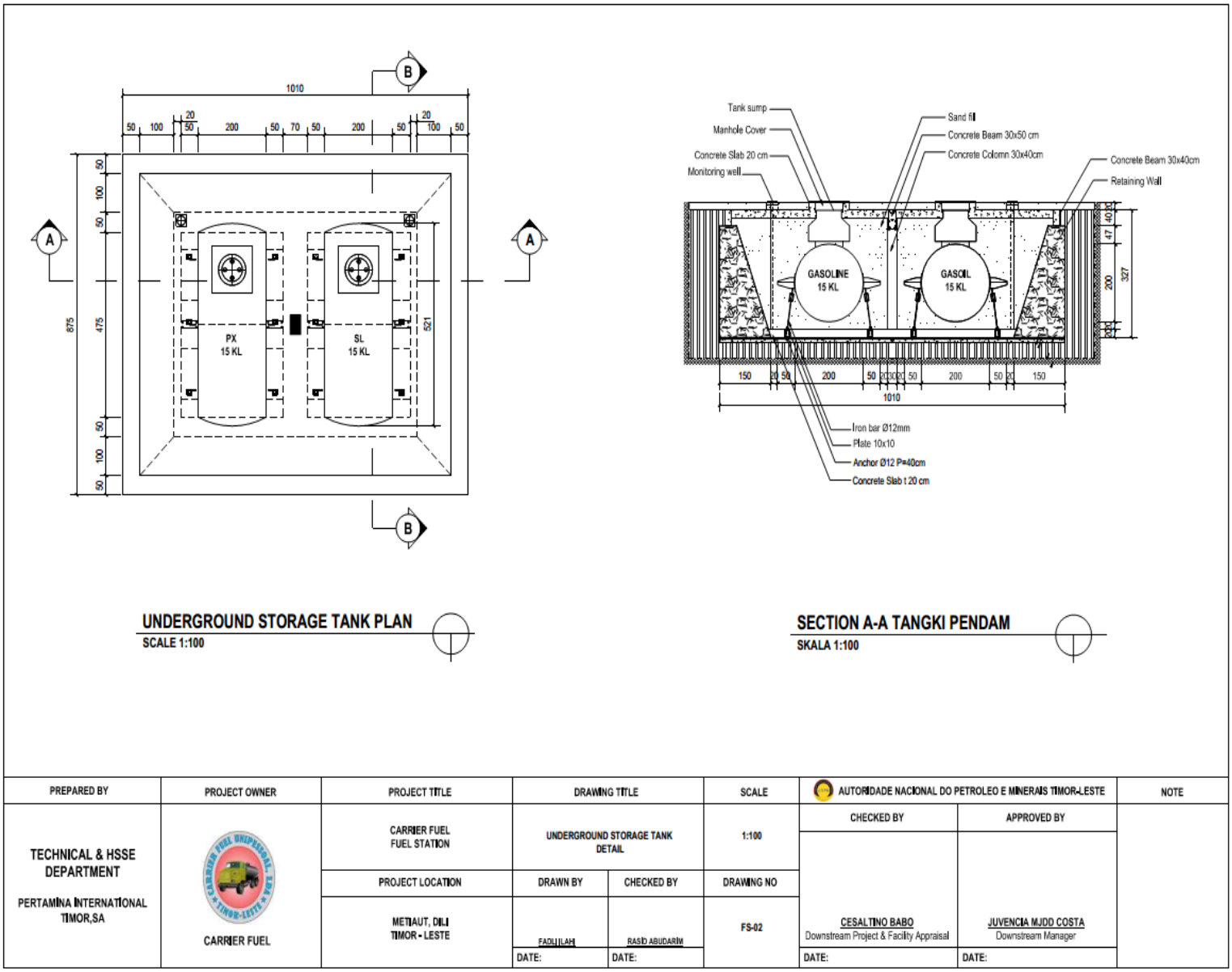
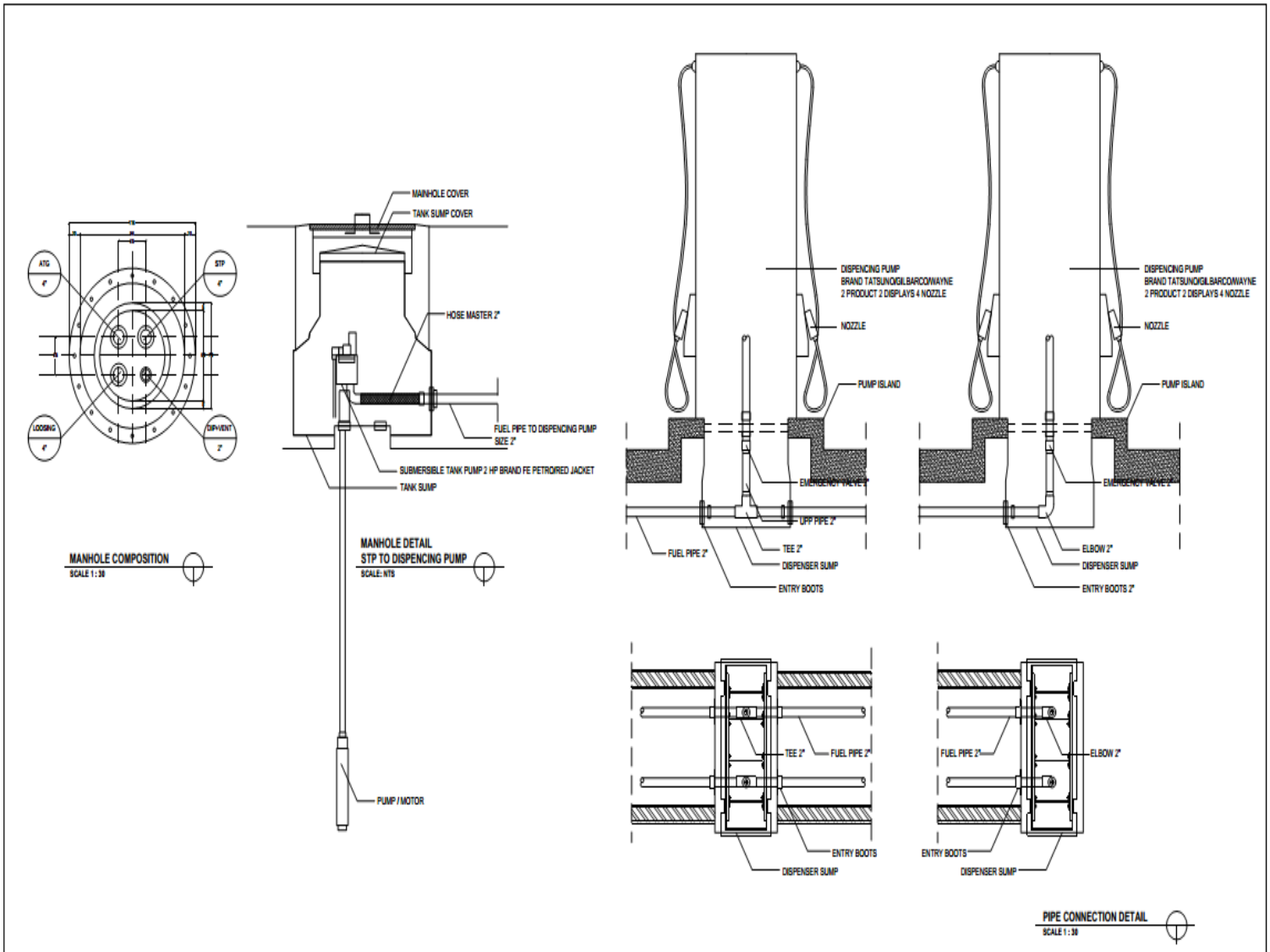


Figure 5. Underground Tank

- **Dispensers**

The fuel dispenser, pump, and piping system that connect to the storage tank are important components of the system. Automatic control mechanism and monitoring equipment will be applied including flow meter to measure flow and quantity of fuel from one place to the other as well as detecting leak from the difference between fuel flowing in and the volume recorded at the tank. The same principle is applied to monitor the flow of fuel out of the storage tank and the volume dispense at the dispenser facility. A fuel dispenser will be installed in the fuel filling station consists of four nozzle (two for gasoline and two for fuel diesel). Every dispenser has extinguisher and extinguishers are also located in the office and filling point area.



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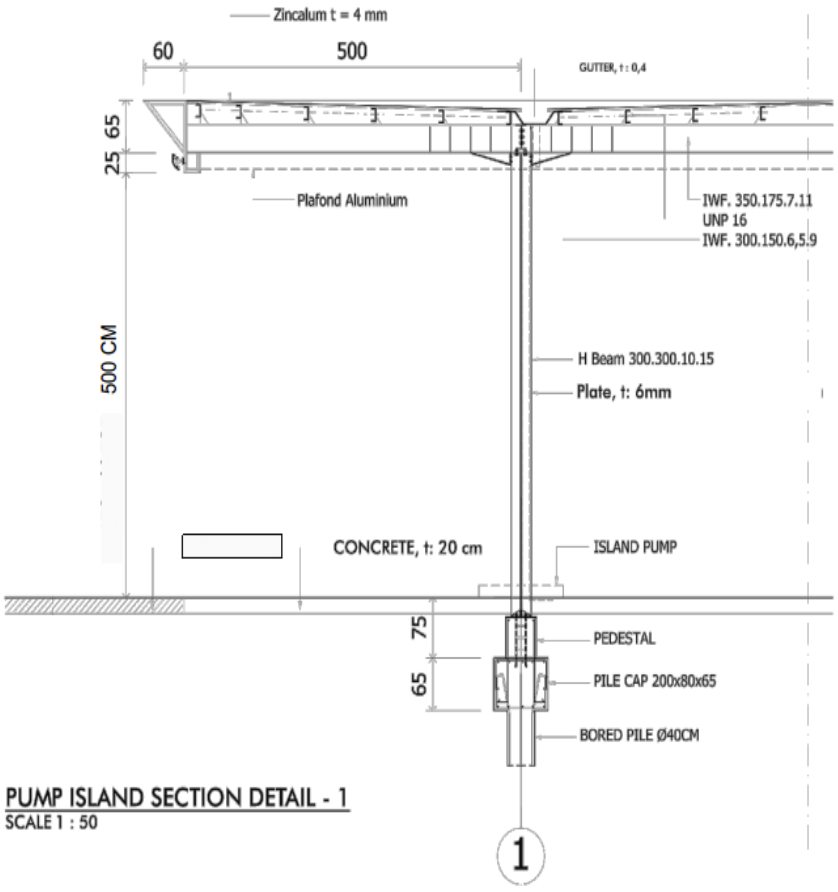
TECHNICAL & HSSE DEPARTMENT PERTAMINA INTERNATIONAL TIMOR,SA	CARRIER FUEL	CARRIER FUEL FUEL STATION	PIPE CONNECTION		1 : 30	CHECKED BY	APPROVED BY	
		PROJECT LOCATION	DRAWN BY	CHECKED BY	DRAWING NO			
		METIAUT, DILI TIMOR - LESTE	FADLILLAH	RASID ABUDARIM	FS-05	CESALTINO BABO Downstream Project & Facility Appraisal	JUVENCIA MJDD COSTA Downstream Manager	
			DATE:	DATE:		DATE:	DATE:	

Figure 6. Fuel Dispenser

- **Pump Island**

Pump Island to set up dispensers on it, size of the pump island determine vehicle in fuel station, and determine the distance between the dispenser and the vehicle to refueled, dimension of pump island; the length is 5 meter, height of pump island is 0.2 meter, and the width is 1.4 meter.



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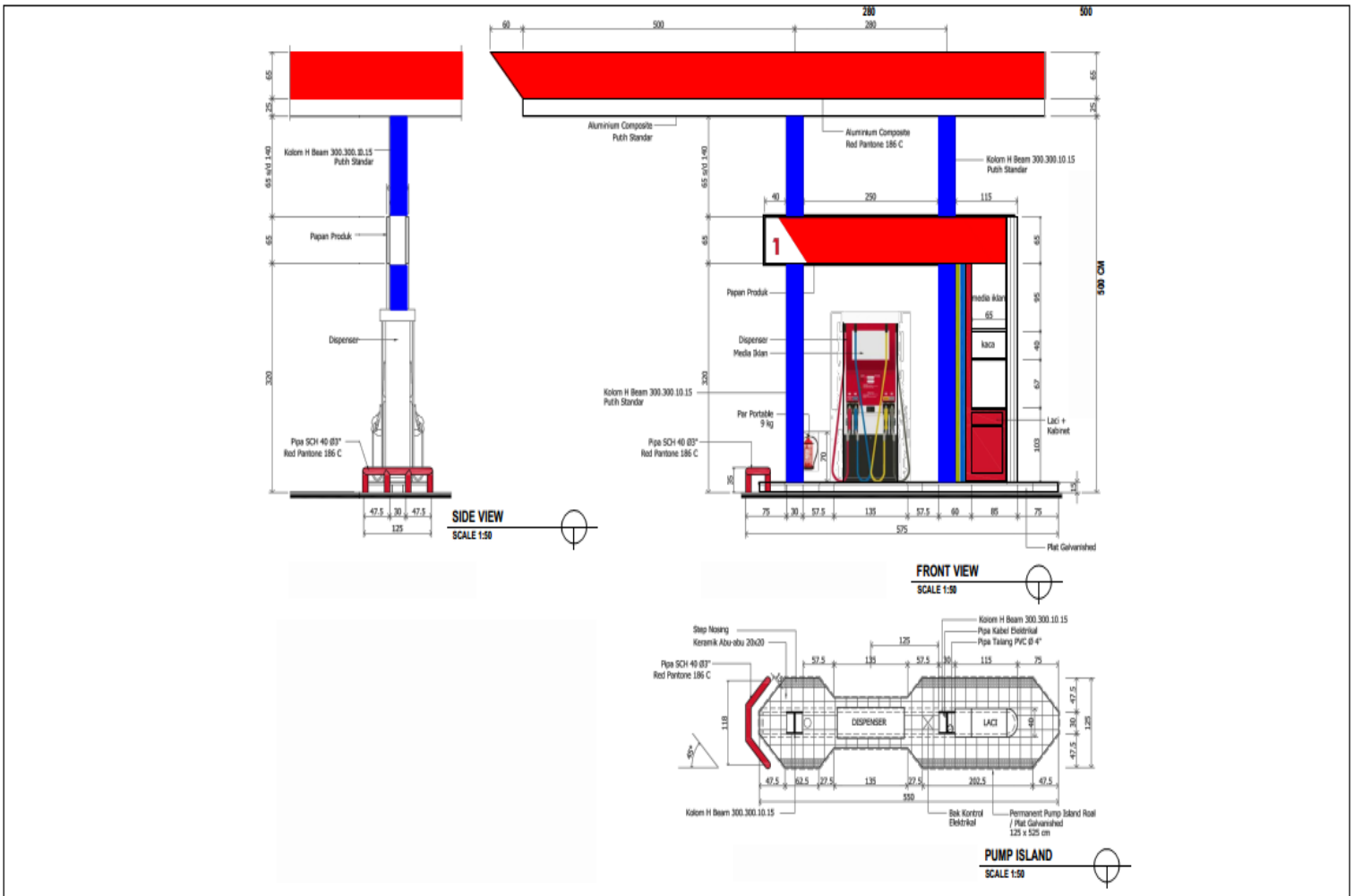
		PROJECT LOCATION	DRAWN BY	CHECKED BY	DRAWING NO			
		METIAUT, DILI TIMOR - LESTE	FADLI ILAH DATE:	RASID ABUDARIM DATE:	PI-02	CESALTINO BABO Downstream Project & Facility Appraisal DATE:	JUVENCIA MJDD COSTA Downstream Manager DATE:	

Figure 7. Pump Island

- **Canopy**

Canopies structure shall be at a height of not less than 4.5 meters from the ground and should be fireproof type. Cladding installed shall be non-combustible and be according to ANPM standards. Such a standard also holds for price display pole signs. The function of a canopy is to:

- ✓ Provides a degree of weather protection; canopy can be a shelter;/shade from weather condition such as sun
- ✓ Withstand the elements such as wind and rain



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		PROJECT LOCATION	DRAWN BY	CHECKED BY	DRAWING NO			
		METIAUT, DILI TIMOR - LESTE	FADLI ILAHI	RASID ABUDARIM	PI-06	CESALTINO BABO Downstream Project & Facility Appraisal	JUVENCIA MJDD COSTA Downstream Manager	
			DATE:	DATE:		DATE:	DATE:	

Figure 8. Canopy

- **Underground Piping System**

The proponent shall use appropriate piping with fusion welded couplings terminated on either end with rubber boots within the pump and tank sumps. No joints are made between the tank and the pump thereby ensuring that if a leak occurs it is contained within the sumps, ensuring that if a breakage occurs in the inner skin, the fuel will run back to the tank containment sump where it is able to be removed.

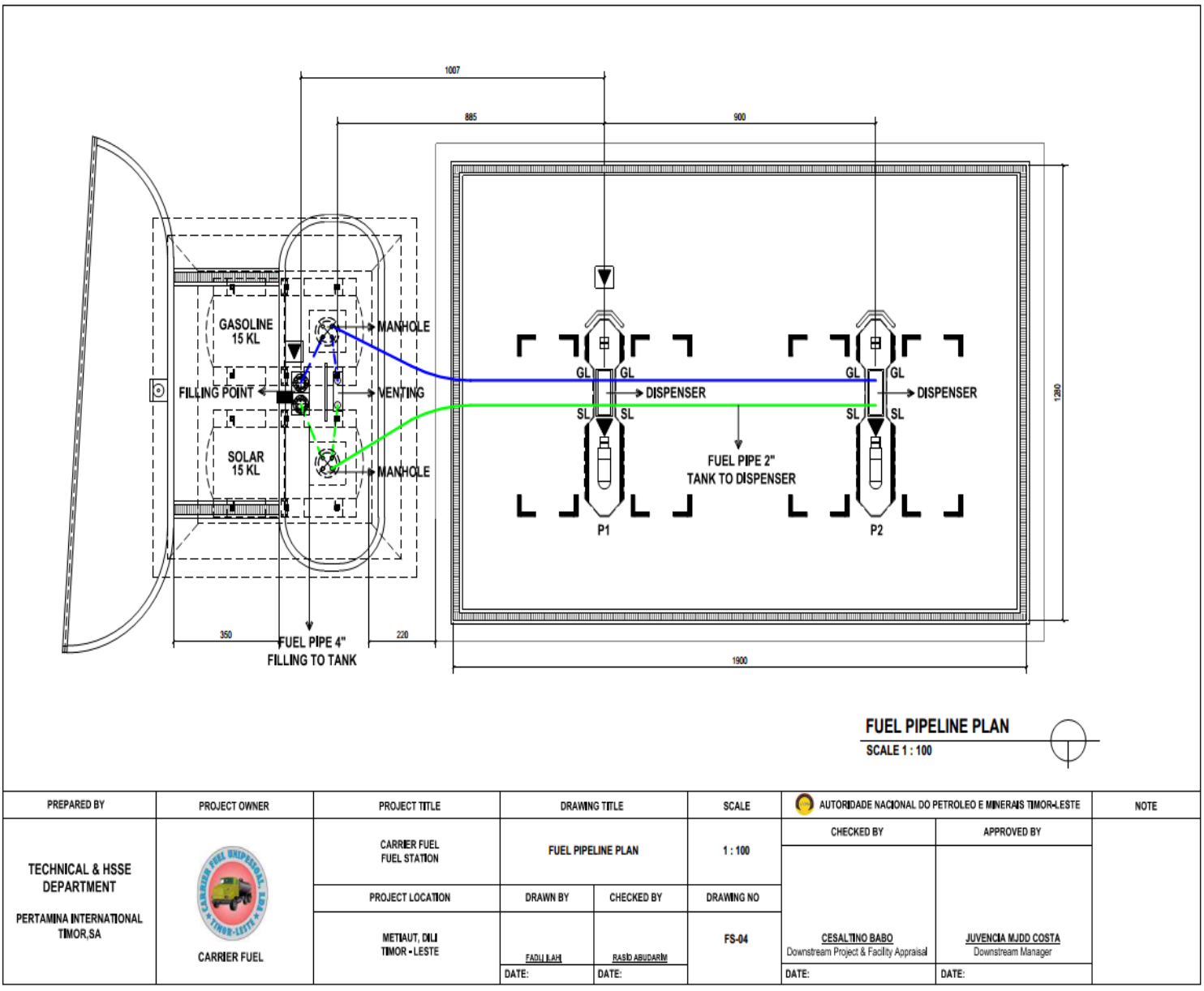
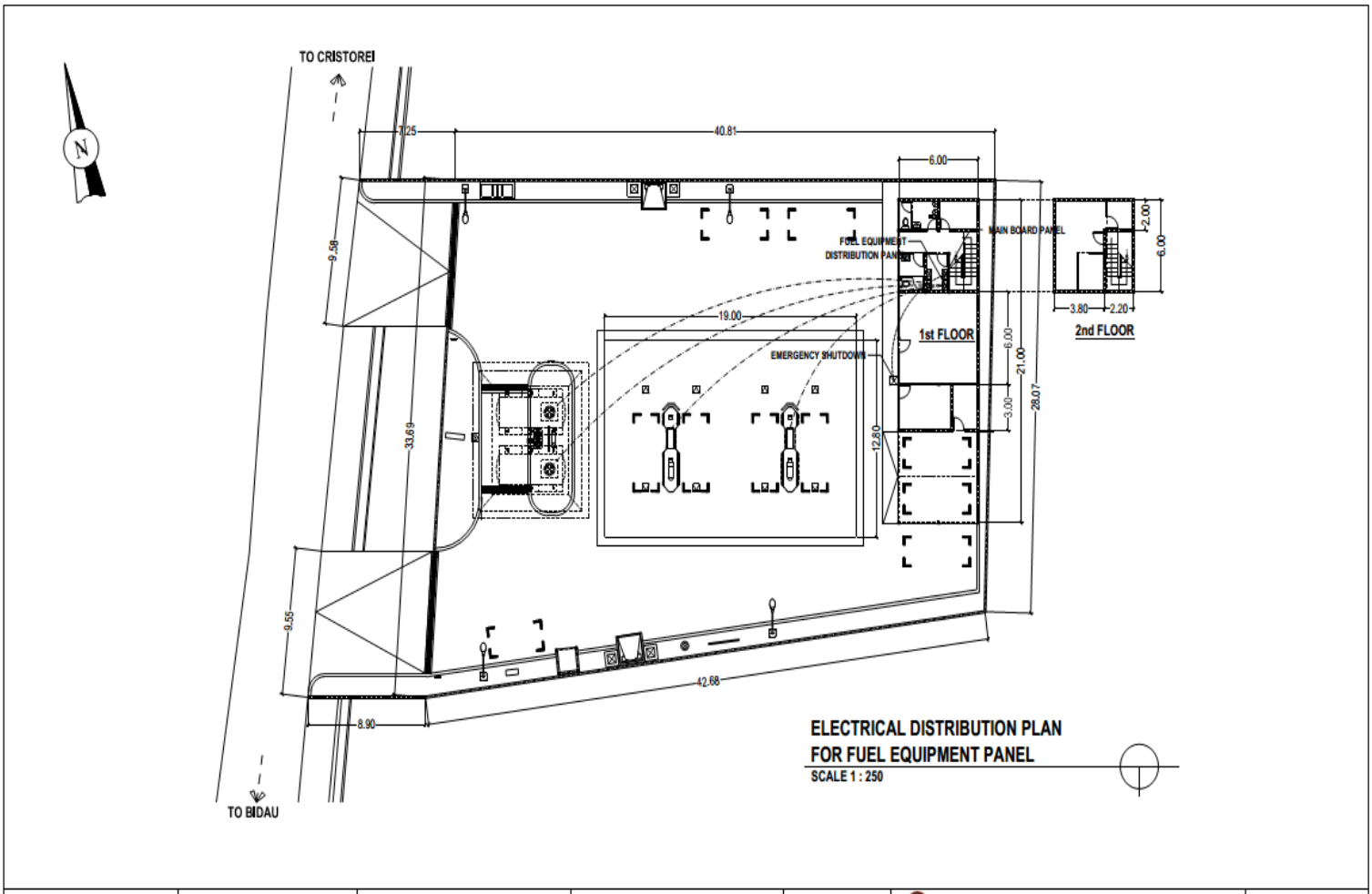


Figure 9. Pipe Distribution Plan

- **Electrical System**

The electrical system at the filling station will be designed by a quality engineer and in accordance with the electric power regulations in Timor-Leste (EDTL) and other electrical standards such as National Electric Code Fuel Filling Station regulation based opn the standard that adopted by ANPM (National Electrical Code (NEC), or NFPA 70). The electrical system will include power supply to the mechanical pumps, underside of the steel canopy, the offices, and Machine/compressor room and security systems. On completion of the electrical works, it is expected that Timor Leste (EDTL) Power will approve the electrical works and issue a power connection certificate to the proponent.



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TECHNICAL & HSSE DEPARTMENT PERTAMINA INTERNATIONAL TIMOR,SA	CARRIER FUEL	CARRIER FUEL FUEL STATION	ELECTRICAL DISTRIBUTION LINE		1 : 250	CHECKED BY	APPROVED BY	
		PROJECT LOCATION	DRAWN BY	CHECKED BY	DRAWING NO			
		METIAUT, DILI TIMOR - LESTE	FADLI ILAHI DATE:	RASID ABUDARIM DATE:	EL-01	CESALTINO BABO Downstream Project & Facility Appraisal DATE:	JUVENCIA MJDD COSTA Downstream Manager DATE:	

Figure 10. Electrical Plan

- **Water Treatment System**

Water treatment is any process that improves the quality of water to make it more acceptable for a specific before disposal to the environment. The fuel filling station is facility with a water treatment system for treating wastewater that may be contaminated with oil or fuel and separating oil from water. The floor areas where there is likely spillage, such as area dedicated to unloading liquid fuels from the fuel tanker into the storage tanks and the forecourt area are made impermeable (cemented) and allow for drainage into the water treatment system.

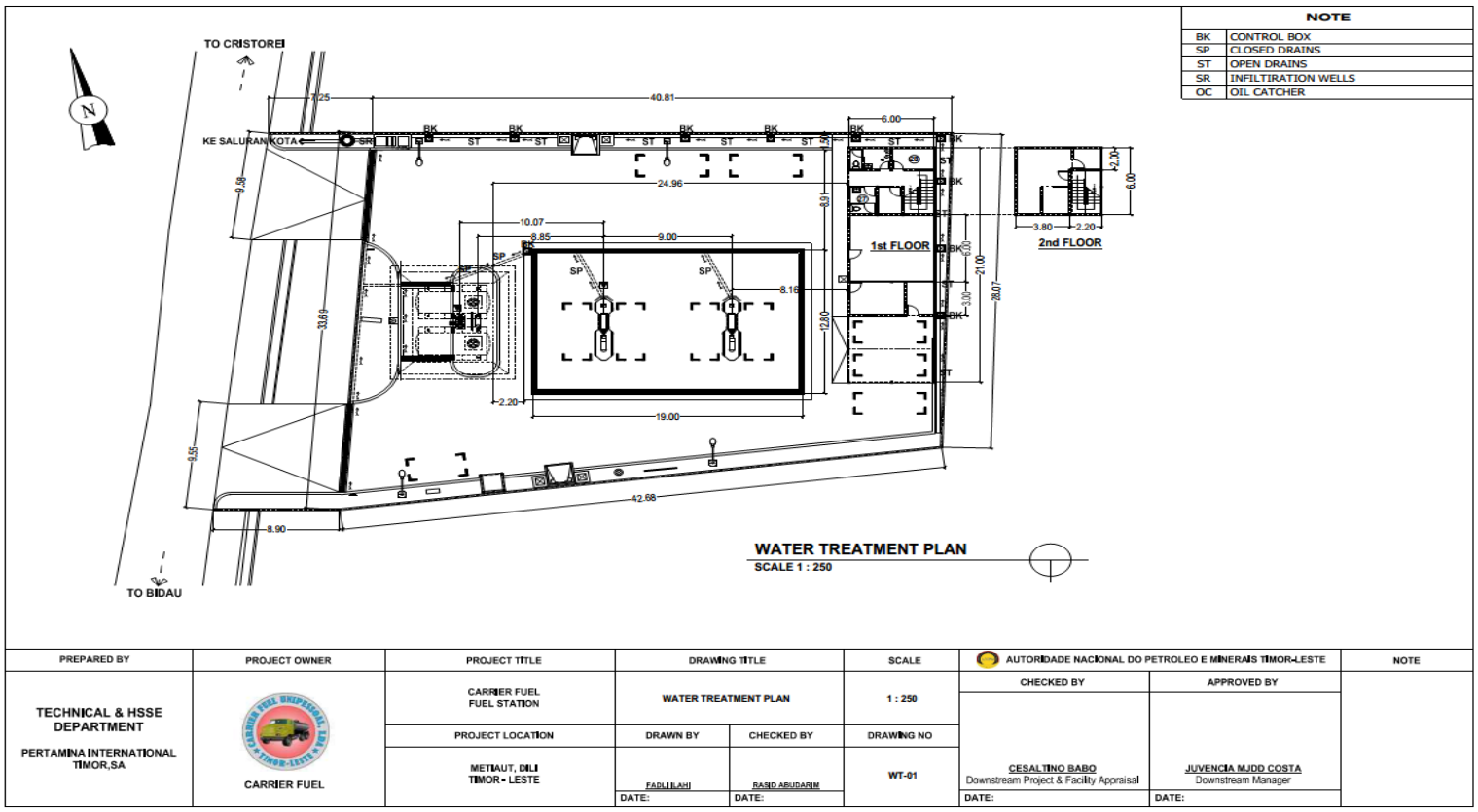
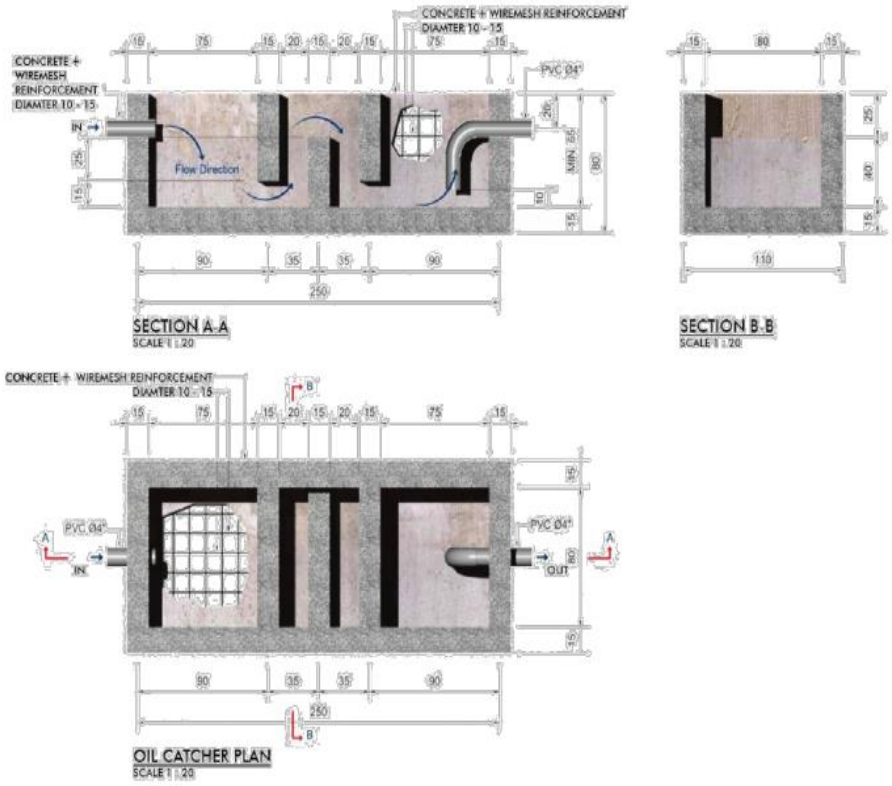


Figure 11. Water Treatment Systems

- **Petrol interceptor/Oil Catcher**

A petrol interceptor is a trap used to filter out hydrocarbon pollutants from rainwater Runoff, oil spills and leak as well. It is typically used in road construction and on Petrol Station forecourts to prevent fuel contamination of streams carrying away the runoff.

Petrol interceptors work on the premise that some hydrocarbons such as petroleum and diesel float on the top of water. The contaminated water enters the interceptor typically after flowing off roads or forecourts and entering a channel drain before being deposited into the first tank inside the interceptor. The first tank builds up a layer of the hydrocarbon as well as other scum. Typically petrol interceptors have 3 separate tanks each connected with a dip pipe, as more liquid enters the interceptor the water enters into the second tank leaving the majority of the hydrocarbon behind as it cannot enter the dip pipe, whose opening into the second tank is below the surface of the water. However some of the contaminants may by chance enter the second tank. This second tank will not build up as much of the hydrocarbon on its surface. As before, the water is pushed into the third tank, by fluid dynamics, as more water enters the second. The third tank should be practically clear of any hydrocarbon floating on its surface.



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		PROJECT LOCATION	DRAWN BY	CHECKED BY	DRAWING NO			
		METIAUT, DILI TIMOR - LESTE	FADLI ILAHI DATE:	RASID ABUDARIM DATE:	WT-02	CESALTINO BABO Downstream Project & Facility Appraisal DATE:	JUVENCIA MJDD COSTA Downstream Manager DATE:	

Figure 12. Oil Catcher

The following map shown are indicates the affected area in the proposed site. Having mentioned the affected area, the proponent considered these impacts during pre-construction, construction, operation and decommissioning phase within provides the environment management plan. During the construction period there are several vegetation's that will be removed such as Delonix Regia, Ai Santo Antonio, Ai Kaisote, Tamarin Tree (*Sukaer*), Ailok, Ai Cafe and a bar house that will be removed and build a supporting office other facilities according to new drawing and minimarket for Carrier Fuel.

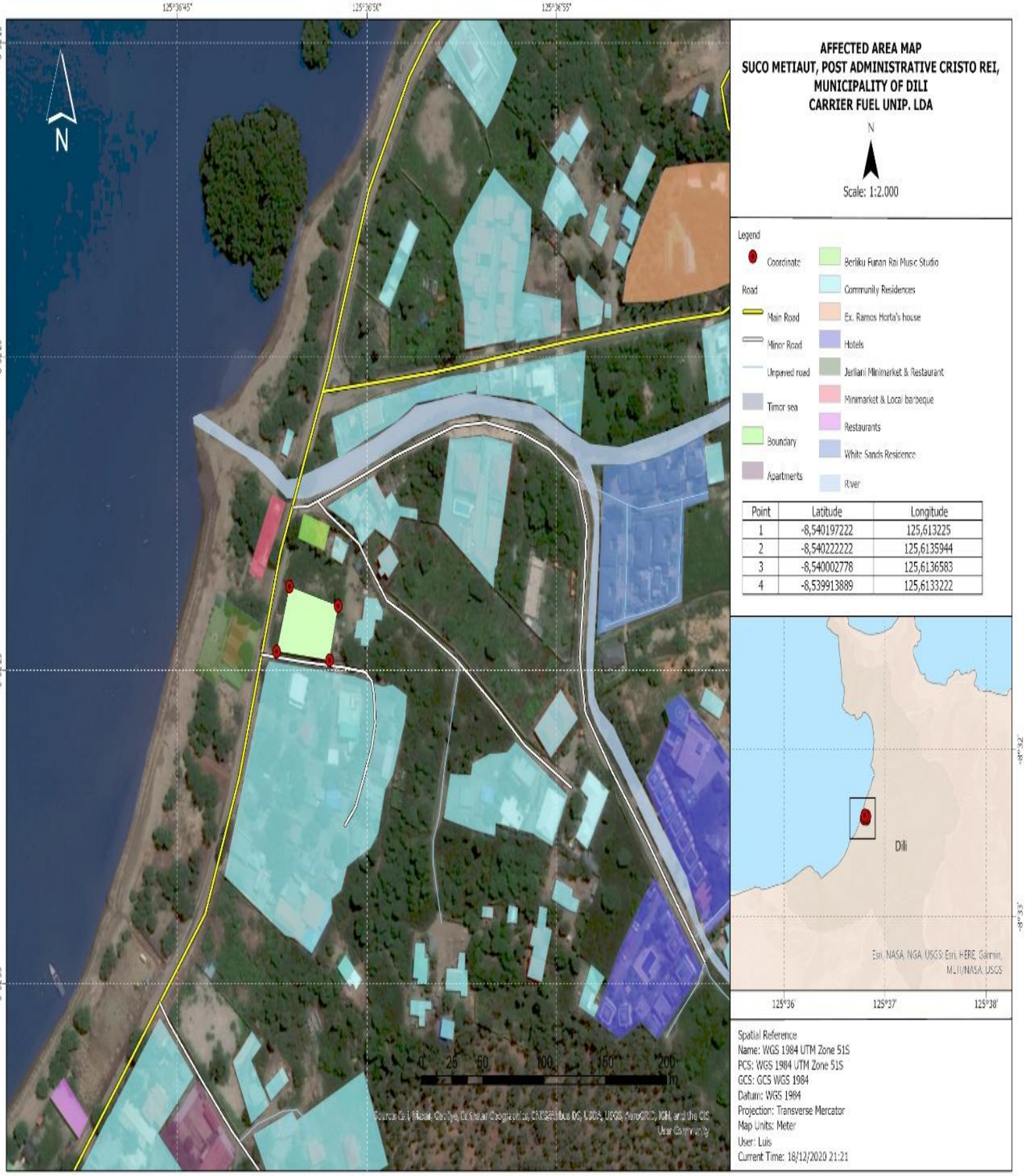


Figure 13. Affected Area Map

Figure 14. Photographs of the Proposed Location (*Source: Hersege Consultant 2019*)

d. Justification and Need for The Project

There are a number of factors considered as motives why the proposed development should be implemented in this particular site which draw the attention to support Cristo Rei development project. Some of the validating factors considered include:

- Accessibility: The accessibility of the site is relatively favorable where the site is located adjacent to the inter-municipality road of Cristo Rei to Hera
- Demand for Petrol Station Services: The demand of petroleum and related services in this area is highly required, due to the motorized traffic in this post Suco is high and the actual condition of Fuel station in Metiaut doesn't fulfill the need of the costumer in Cristo Rei and Bidau.
- The proper standard. There are several retail sellers in the streets, which may not be sufficient to response domestic demand. With this facility in place, the motorists will have a shorter distance to obtain the products and services.

Low Risk to the Locals: The area with the site for the proposed fuel station and gas oil storage is far to the community settlement, approximately 100 meters to 1km or so, this makes the project suitable for the area since there are very few people at risk from the activities of the project.

e. The Proponent's Endorsement of The SEIS

Carrier Fuel is fully responsible to endorse and implement all the requirements of this Simplified Environment Impact Statement (SEIS); including implementation of requisite legal frameworks. Monitoring of the fuel filling station activities will be carried out by the Carrier Fuel as the project's proponent and will be responsible for day-to-day management of the project's activities. "Endorsement letter attached".

f. The Structure of The SEIS

This document has been structured to describe the new, project-related facilities and their likely impacts - positive, neutral or negative - on the existing environment (including the community, the natural environment and local cultural heritage) in the context of prevailing government policies and law:

Section 1: Executive Summary - provides a summary of the key findings and conclusion of the SEIS in each phase such as; preconstruction phase, construction phase, and operation phases.

Section 2: Details of Proponent - provides an information of proponent including; information of project director, information of project manager and information of project coordinator.

Section 3: Details of Consultant - provides details information of consultant who prepare and written the SEIS and EMP report.

Section 4: Project Description - provides a description of the project including infrastructure, the various phases of development, their location and an outline of likely construction activities.

Section 5: Regulatory Framework - describes the relevant environmental policies, legislation and international conventions to regulate the project, and acknowledges that these policies represent the aspirations of the Go TL and what it aims to achieve for the people of Timor-Leste should the project proceed.

Section 6: Description of Environment - provides a preliminary assessment including a description of the prevailing climate, topography, geological, air quality, surface water, soil, socio-economic, and cultural heritage conditions within Metiaut development area as whole and the Fuel Station and Diesel Storage development area.

Section 7: Alternative – provides a baseline description of the alternative project location, size, design, technology and methods.

Section 8: Climate Change – describes an information of climate changes which occur during the each phases; preconstruction, construction and operation

Section 9: Impact Assessment – outlines the findings of the impact assessment and mitigation measures through identification of environment impacts, mitigation measures, monitoring measures and responsibility.

Section 10: Summary of EMP – provides summary impact, mitigation measures to minimize potential adverse impact to the environment

Section 11: Public Consultation and Information Disclosure - addresses the requirements for undertaking public consultation under the of Timor-Leste Decree Law No. 5/2011, and sets out the stakeholders and consultation activities that were undertaken for this stage of the project.

Section 12: Difficulties Encountered – provides information of difficulties encountered in collecting or assessing the information presented in the SEIS Chapter 13: Conclusions and Recommendations – provides the overarching conclusions, and recommendations for further action to be taken

Section 13: **Conclusion and Recommendation**- Provide the conclusion and recommendation of Simplified Environmental Impact Statement

Section 14: Non-Technical Summary – provides information in simple language so as to be understood by the average person.

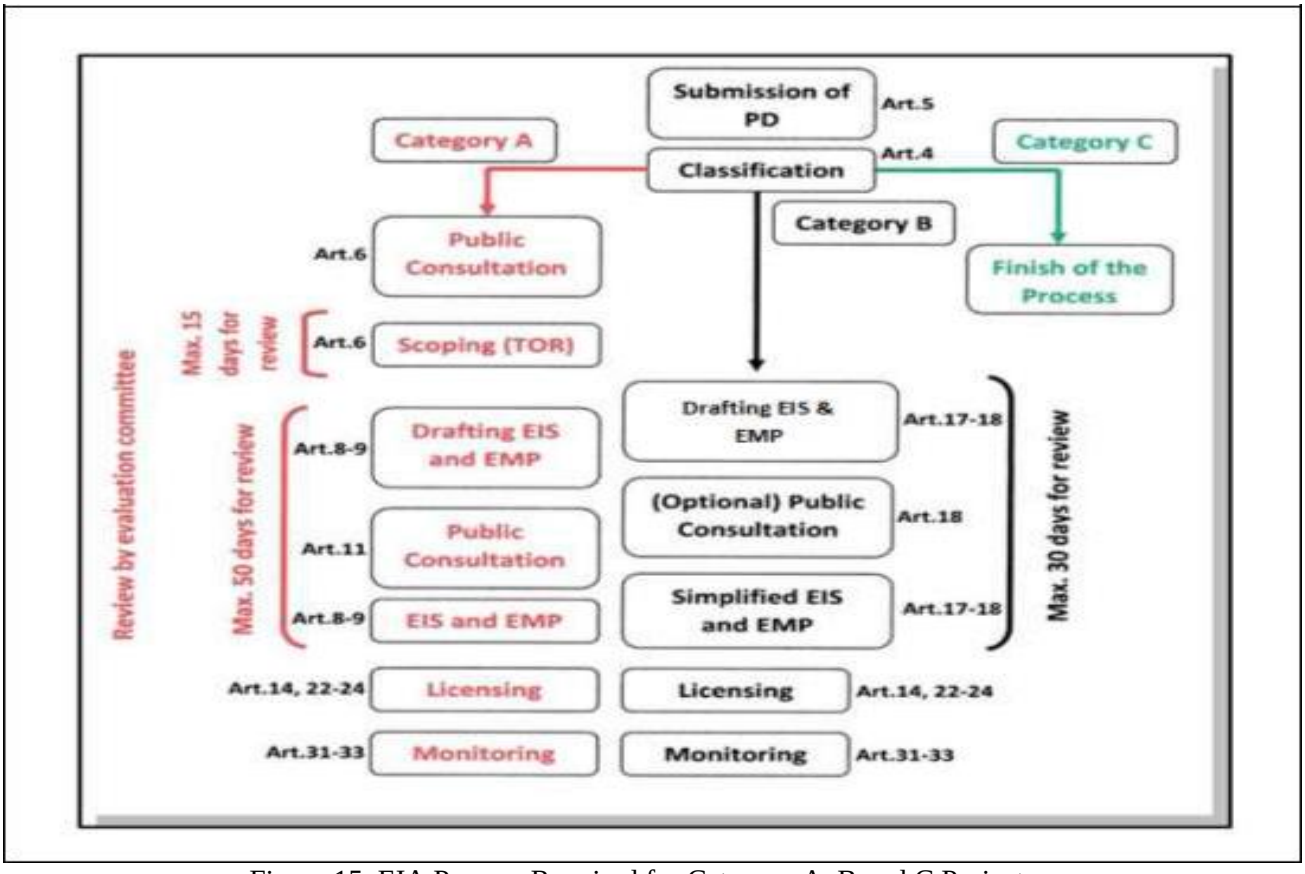


Figure 15. EIA Process Required for Category A, B and C Project

5. LEGAL FRAMEWORK

This environmental impacts assessment as a basis to prepare the report SEIS and EMP has been conducted by taking the reference from the legal framework of environmental safeguard policy, as well as the Timor Leste regulation of petroleum and mineral resources management. The following table, show the main regulation related to EIA and petroleum activity in Timor Leste.

Table 2. Regulation Related EIA

Agency	**Relevant Laws**
Ministry of Commerce and Environment	Decree Law No. 5/2011
	Decree Law No. 26/2012 on Environmental base law
	(Draft) Law on Biodiversity (March 2012)
	(Draft) Law on Protected Area (May 2013)
	UNTAET Law No. 19/2000 on Protected Area
Ministry of Agriculture and Fisheries (MAF)	Law No. 12/2004 on Crimes related fisheries
	Law No. 6/2006 on legal Basis for management and Regulation of Fisheries and Agriculture
National Petroleum and Mineral Authority	1. ANPM Regulation no.2/2014, of 24, October 2014, first Amendment of ANP regulatory No. 1/2012 on the downstream petroleum activity. 2. ANPM Regulation no.3/2014, of 24, October 2014, first amendment and operation of fuel filling station
International	1. Convention on the Prevention of Marine pollution by Dumping of Wastes and other Matter (London Dumping Protocol) 2. Indonesian Petroleum Regulation

Other relevant regulation required in absence of local regulation are also applicable such WHO, IFC, USEPA, where some standard parameters of the environmental indicator was used. The following table shows the most applicable international standards parameter of the environmental indicators:

Table 3. Applicable International standards in Absence of Timor Leste's Standards

Environmental Standard	**TL National Standard**	**International Standard**
Drinking water Quality standards	Adopted WHO Standards	WHOs
Waste water effluent	None	WHO/USEPA
Ambient Air Quality Standards	None	IFC/WHO
Heavy Metal Standards	None	WHO
Noise	Leq55dB(A) per UNTAET Regulation	Word Bank
Vibration	None	USEPA
Soil	None	IFC/World Bank
Ambient receiving water Quality Standards	None	IFC/WHO
OHS	None	IFC/ISO-81001

- **Downstream Regulations**

  First Amendment to Regulation No. 3 /2014 on Installation and Operation of Fuel Filling Station. This regulation serves as a legal instrument necessary to efficiently manage the procedures for reviewing existing installations, installing new Fuel Filling Stations, renovating or making alterations to existing Fuel Filling Stations, as well as their operation.

- ***General Principles for Installation of Fuel Filling Station***

  Section I of this regulation covers the *location, project and licensing approvals*.

  (a) The approval of the location of a new or an existing Fuel Filling Station is done prior to the presentation and approval of a project for the construction of a Fuel Filling Station. It must be made through the completion and submission of the form included in annex I in this regulation, called "*Application for Approval of Location of a Fuel Filling Station*" to the ANPM.

  (b) After obtaining a Certificate of Approval of Location for Fuel Filling Station, operators of new or existing Fuel Filling Station shall present to the ANPM an "*Application for the Approval of a Project for a Fuel Filling Station*", in the form included in Annex II to this

  Regulation.

  (c) The License Application shall follow the rules set forth in ANPM Regulation No.1/2012, of 24 October 2012, and the License is issued in the form set out in Annex I to Decree Law No.1/2012, of 1 February 2012, on the Downstream Sector. First Amendment to ANPM Regulation no.1/2014 on Fuel, Biofuel, and Lubricant Quality Standards and Specifications. This regulation sets the minimum quality standards for Fuel, Biofuel, Lubricants and similar products available in the domestic market and minimum standards of consumer protection.

6. DESCRIPTION OF THE ENVIRONMENT

a. Physical Components

i. Climate (including any implication of the climate change)

The climate is tropical in Metiaut. The summers here have a good deal of rainfall, while the winters have very little. The Köppen-Geiger climate classification is Aw. In Metinaro, the average annual temperature is 27.0 °C. In a year, the average rainfall is 1307

mm. The project could affect the annual climate in the area, but did not experience major changes because the duration of the project to be implemented did not require much time.

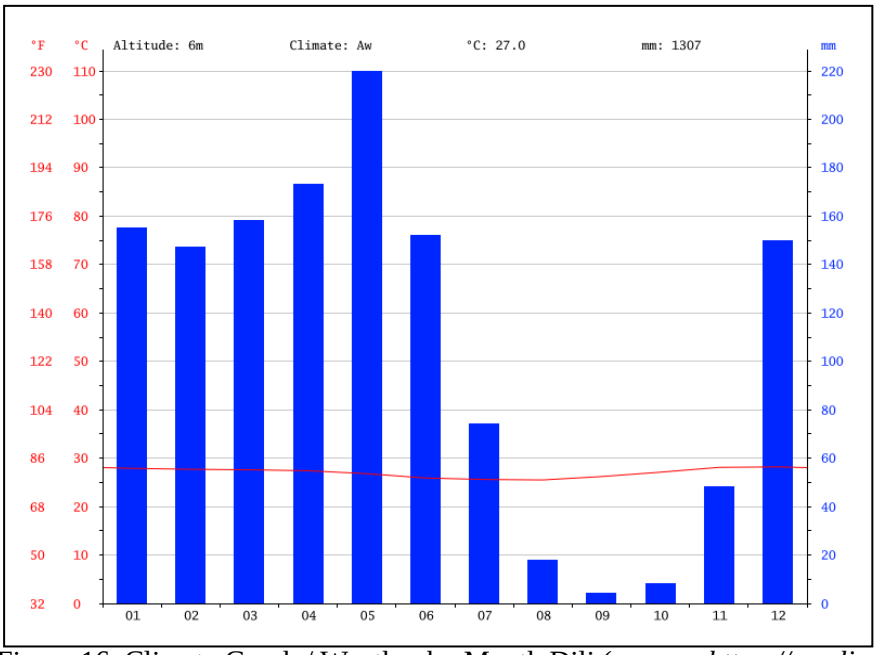


Figure 16. Climate Graph / Weather by Month Dili (*source: https://en.climate-data.org/asia/china/gansu/dili-855768/)*

The driest month is September. There is 4 mm of precipitation in September. Most of the precipitation here falls in May, averaging 220 mm. With an average of 28.2 °C, December is the warmest month. August is the coldest month, with temperatures averaging 25.5 °C. The precipitation varies 216 mm between the driest month and the wettest month. Throughout the year, temperatures vary by 2.7 °C.

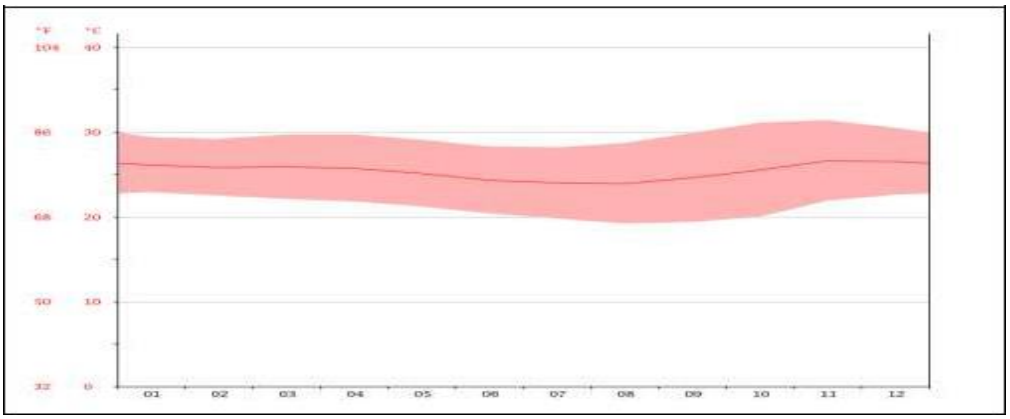


Figure 17. Average Temperature Dili (*source: https://en.climate-data.org/asia/china/gansu/dili-855768/)*

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature (°C)	27.9	27.7	27.6	27.4	26.8	25.9	25.6	25.5	26.2	27.1	28.1	28.2
Min. Temperature (°C)	24.4	24.1	23.7	23.5	22.8	21.9	21.3	20.7	21	21.8	23.4	24.1
Max. Temperature (°C)	31.4	31.3	31.5	31.4	30.8	30	29.9	30.3	31.5	32.5	32.9	32.4
Avg. Temperature (°F)	82.2	81.9	81.7	81.3	80.2	78.6	78.1	77.9	79.2	80.8	82.6	82.8
Min. Temperature (°F)	75.9	75.4	74.7	74.3	73.0	71.4	70.3	69.3	69.8	71.2	74.1	75.4
Max. Temperature (°F)	88.5	88.3	88.7	88.5	87.4	86.0	85.8	86.5	88.7	90.5	91.2	90.3
Precipitation / Rainfall (mm)	155	147	158	173	220	152	74	18	4	8	48	150

Figure 18. Weather Average Dili (*source: https://en.climate-data.org/asia/china/gansu/dili-855768/)*

ii. Topography

Timor-Leste's topography is dominated by a massive central mountainous backbone that rises to 3,000 meters and is dissected by deep valleys. On the northern side the mountains extend almost to the coast, but on the southern part the mountains taper off some distance from the coast, which provides areas of coastal plain. Up to 44% of the area has a slope of 40%.

The topography within 2 km of Dili contains very significant variations in elevation, with a maximum elevation change of 1,391 feet and an average elevation above sea level of 1,024 feet. Within 10 miles contains very significant variations in elevation (2,570 feet). Within 50 miles contains large variations in elevation (7,689 feet).

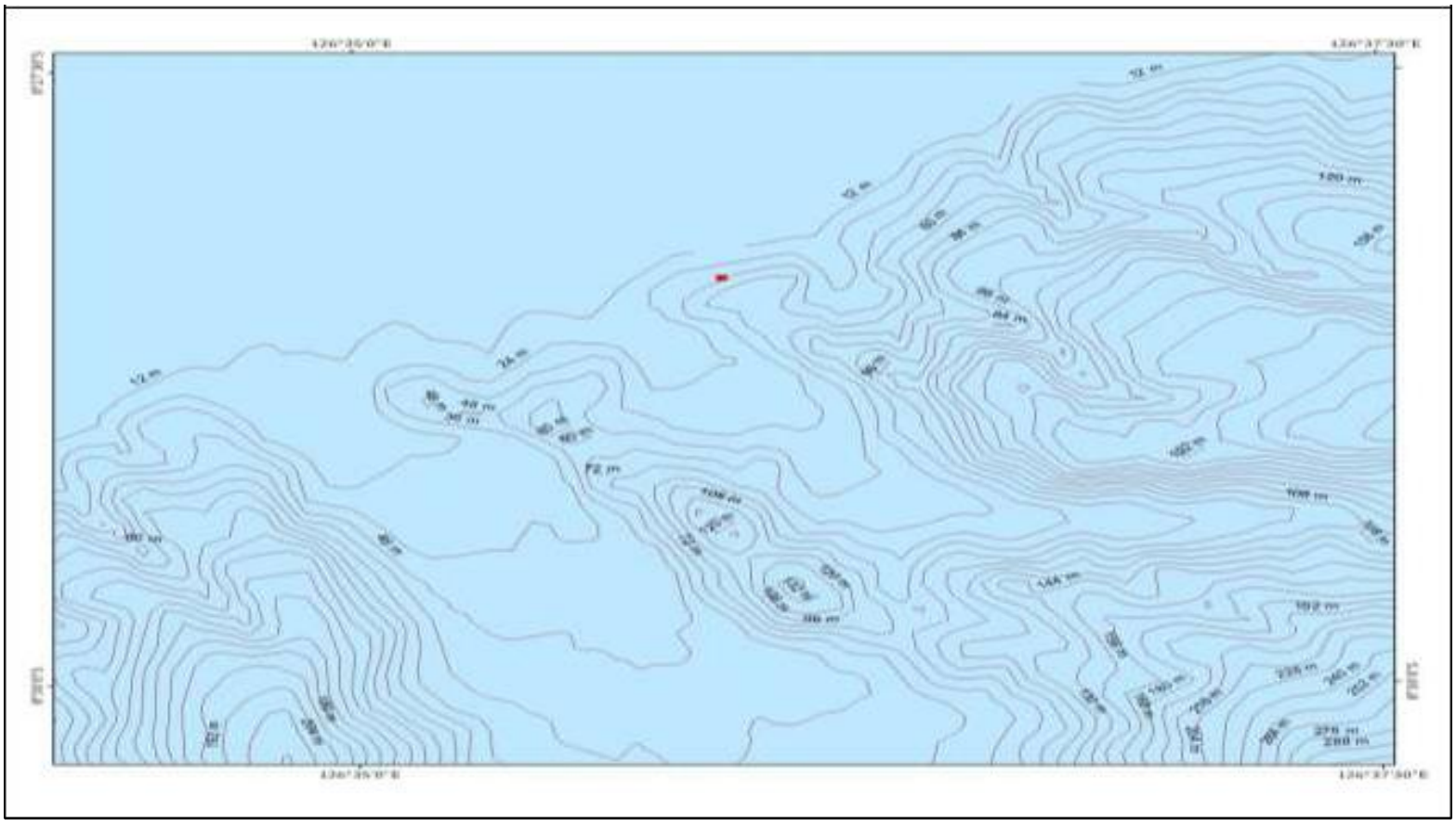


Figure 19. Topography Map (*source: Timor Leste SRTM)*

iii. Geology

The tectonics of the island of Timor occurred due to the collision between the Australian micro plate and the afhanitic asia plate resulting in a fault, namely is thrust fault. This geomorphological results in very steep slopes that represent a balance between geological uplift and erosion and also in very high sediment loads in the river leading to broad and thick alluvial fans and floodplains along the river basin and across the coastal plain.

The project location is underlined by Alluvial which consists of loose sediment, clay to the size of a boulder, tens of meters thick. In fact in Timor-Leste, climate and, more importantly, soil relief and therefore excessive soil erosion and movement, will be one of the most important factors controlling soil development.

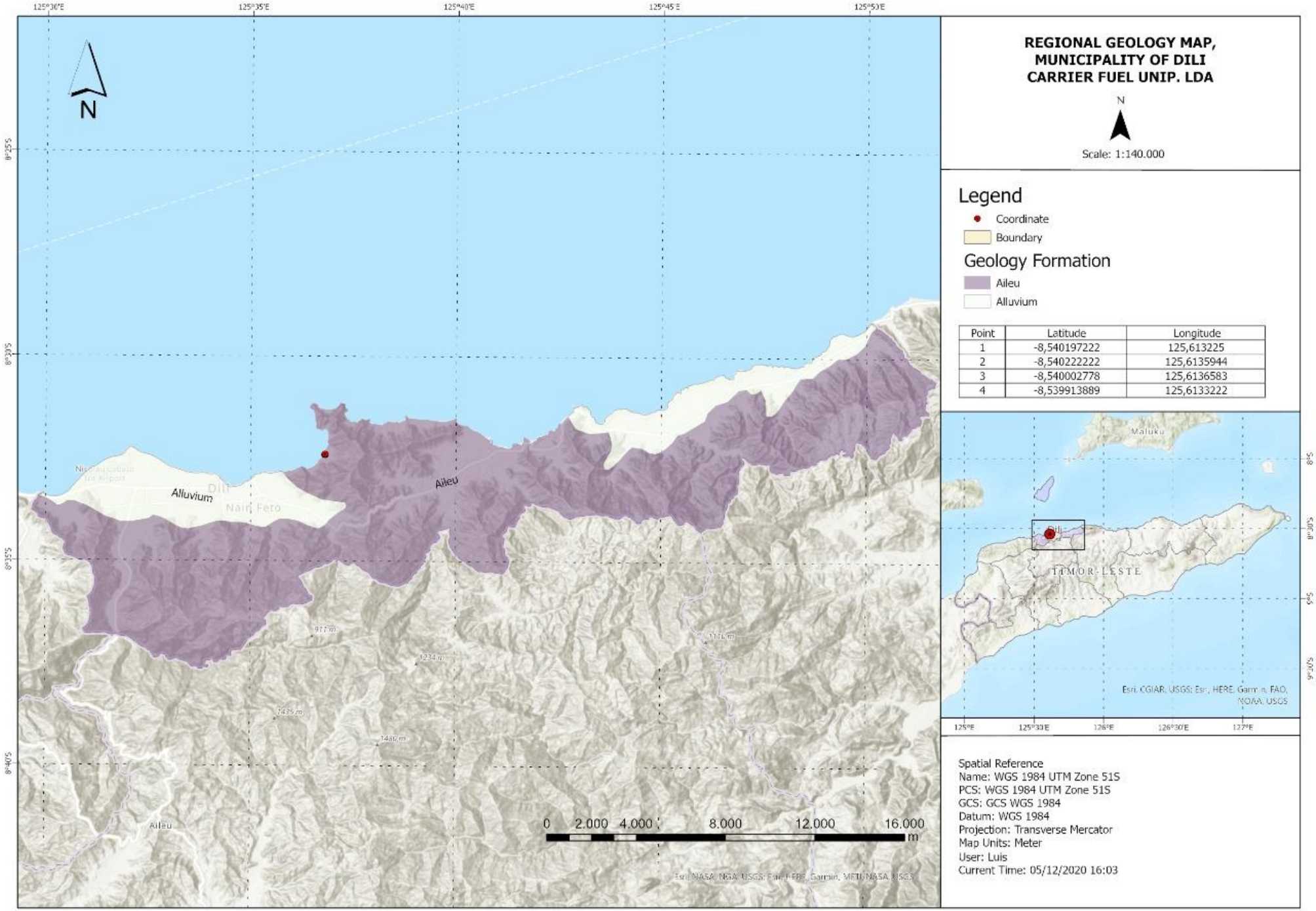


Figure 20. Geology Regional Map (*Source: Hersege Lda 2020*)

iv. Air Quality

Air quality potentially is impacted from volatile Organic Compound (VOC) associated with low hydrocarbon chain compound easily evaporated in to the air. Gasoline contains benzene that is easily evaporated into the atmosphere during handling of product. Large amount of VOC transferred into the atmosphere will cause pollution and can be harmful to those expose to it. Given the capacity and the closed handling system, the nature of this impact is localized and can be significantly mitigated.

Potential for air pollution from the use of product (vehicle emission) can come in the form of release of NOx SOx Cox and particulate Matter (PM) from the combustion. Pollution from vehicle emission depends on several factors including:

- Specification of fuel for example, in the case of gasoline, use of lower RON could lead to higher emission of NOx and Cox.
- Engine maintenance
- Traffic congestion

Air pollution from use of product has great potential to spread nationally even trans boundary to the neighboring nations. Most appropriate mitigation measures for this type of pollution, however, depend on local policy and regulatory framework in relation to the quality of the petroleum products allowed to be imported in, engine maintenance as well as traffic planning and management. Potential mitigation measures that can be implemented by Carrier Fuel Unipessoal Lda.

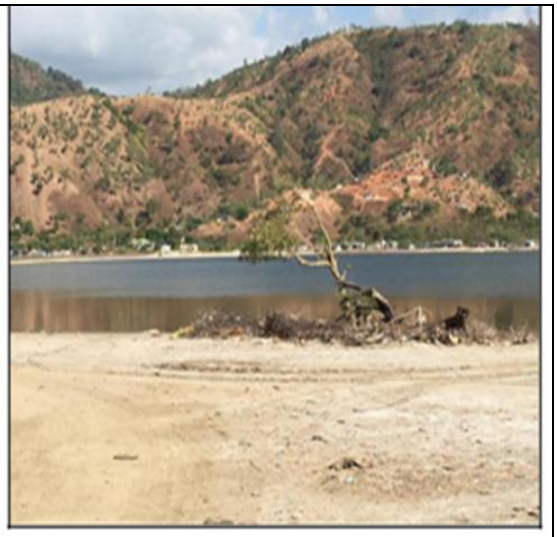
The initial measurement that conducted by using Airradio to measure the air quality in the proposed location. There are two points that have chosen: first point is inside the proposed project location and second is in the nearest community residence the result shown that the PM 2.5 18 is ug/m3 in the project location, and 20 ug/m3 in second point both results describe below the threshold recommended by International Ambient Air Quality Standard WHO 2001, 25 ug/m3–24 hours mean And PM 10 in the both is almost similar 11.1 ug/m3 and 12.1 ug/m3 respectively both results describe below the threshold recommended by International Ambient Air Quality Standard WHO 2001, 50 ug/m3 – 24 hours mean.

CO2 in the both points are 456 and 515 ppm. The temperature in the both points is 33oC and 35 oC, the humidity in the both points is 56 and 60 %RH, the wind speed is 0.3 – 2.1 m/s and the win direction is from North to South. According to the data at the project site shows that CO, SOx and NOx are zero it means no exist in project location.

v. Surface Waters

Due to non-existence of natural surface water bodies or even perennial man-made channels/drainage line in the area, potential for surface water impacts from the operation is only limited to pollution to the runoff during raining season. Several activities have the highest potential to generate this kind of pollution including leakage during loading of fuel from tanker into storage tanks and during filling into the vehicular as well as handling of sludge formed at the bottom of the tanks. Pollution to the surface water has the potential to reach large areas depending especially on the scale of the leaks. However, due to the use of standardized equipment and method, leakage can be kept into the minimum and when there is a leak, it is being diverted into the oil catcher to separate water and oil. The *José Mate River* is a seasonal river and located approximately 80 meter to the west of proposed location and *Tasi Tolu Lake* is located approximately ± 8 Km to the west of proposed Location.

José Mate River (Seasonal River)



Tasi Tolu Lake

Figure 21. Surface Water

vi. Groundwater

Dili has a tropical monsoon climate with annual precipitation of aproximately 1,200 mm that mostly occurs during the annual wet season from November to April. Prolonged dry seasons attributed to climate change may cause additional pressure on groundwater stress.

Based on the observation in the field, there is water well that owned by community in Metiaut with the diameter of 1.5 meter and the depth of the well is 16 meters. The existing of the proposed project will not affect the groundwater.

Figure 22. Underground Water (Tube Well)

vii. Coastal Water

Importance of Coastal Waters. As the interface between terrestrial environments and open oceans, coastal waters encompass many unique habitats and serve important human needs. Coastal habitats include estuaries, coastal wetlands, sea grass meadows, coral reefs, mangrove forests, kelp forests, and upwelling areas.

The *condition* of coastal waters reflects a group of interrelated physical, chemical, biological, and ecological characteristics. Coastal water condition can be affected by a variety of stressors.

- **Nutrients and pathogens** can come from storm water, agricultural runoff, and sewage discharge or overflows. Excess nutrients can cause algal blooms that result in low dissolved oxygen levels, which harm aquatic life. Pathogens (e.g., bacteria and viruses) can affect the health of people who use waters for recreation or eat contaminated fish or shellfish.

- **Chemical contaminants** can come from sources such as agricultural runoff, industrial activities, and atmospheric deposition of airborne pollutants. Of particular concern to human health are toxic chemicals in consumable fish and shellfish.

- **Changes in temperature and salinity** can be influenced by weather patterns or the condition of freshwater inputs. These changes can affect habitat quality and the status of native plant and animal populations, and can also influence algal blooms.

- **Non-indigenous species** can affect the status of native communities. In particular, invasive species can kill or crowd out native populations or otherwise alter coastal watersheds.
- **Overharvesting** can affect populations of fish, shellfish, marine mammals, and other species.
- **Changes in the extent of coastal waters** can also affect their condition. For example, beach erosion and wetland loss can affect contaminant and sediment levels. Wetland loss can also affect the condition of the wetlands that remain.

The northern coasts are mainly characterized by the steep mountains falling directly into the sea, making for rocky and steep coast along most of the shoreline. Municipality Dili offers a wide coastline with attractive beaches, ideal for swimming and other water sports, and fishing. The proposed location will not affect the coast area in Cristo Rei.

viii. Marine Waters

Marine water quality refers to the presence or absence of any number of pollutants in ocean waters. Some of the more important pollutants include oil, sedimentation, sewage, nutrients, heavy metals, and thermal pollution. However, due to the use of standardized equipment and method, leakage can be kept into the minimum and when there is a leak, it is being diverted into the oil catcher to separate water and oil.

Figure 23. Marine Water

ix. Soil

Soil is also an important receiving environment that can be affected by the project, if there shall be transport of contaminant to the soil and that percolate further to eventually reach groundwater aquifer. Pollutant transfer depends on the type of soil and distance between the surface and the aquifer. Potential for leaks into the soil is especially high during the unloading and distribution of petroleum product during tank maintenance cleaning usually happen every five (5) years. Maintenance cleaning requires the removal of sludge usually formed at the bottom of diesel fuel tanks. Temporary pilling of the sludge at the facility also has the potential to leach contaminant into soil

Soils are the thin layer covering the entire earth's surface, except for open water surfaces and rock outcrops. The properties of soil are determined by environmental factors including climate, parent materials, relief, organisms and age factor. There are significant number of different soils, a result of the different kinds and degrees of soil forming factors and their combinations. The geotechnical assessment shows that the alignment traverses several soil types; scaly clay, river terrace deposits and alluvial sediments, through very condensed gravel and sand sequences. The fluvial fan is mainly composed of coarse (gravel and sand) granular deposits.

The type of soil in the proposed project is *Tropofluvents* are a soil order in USDA soil taxonomy. They form quickly through alteration of parent material. They are more developed than Entisols. They have no accumulation of clays, iron oxide, aluminum oxide or organic matter. They have an ochric or umbric horizon and a cambric subsurface horizon. Further test for the soil will be conducted when the construction is begun and the result of the test will be submitted after obtaining the result from the laboratory.

On and across steep slopes soil profiles are chaotic and rock strewn without obvious profile development as in the soil section below, above Areia Branca Dili (nearby proposed project). In reality, such soils are better called 'Regolith', defined in the 'Dictionary of Geological Terms' as: 'The layer or mantle of loose, incoherent rock material, of whatever origin, that nearly everywhere forms the surface of the land and rests on the hard or 'bed' rocks. It comprises rock waste of all sorts, volcanic ash, glacial drift, alluvium, windblown deposits, vegetal accumulations and soils.

Figure 24. Soil and Rock nearby project location

Soil permeability is the property of the soil to transmit water and air and is one of the most important qualities to consider for proposed project of Fuel filling station. Many factors affect soil permeability. Sometimes they are extremely localized, such as cracks and holes, and it is difficult to calculate representative values of permeability from actual measurements. A good study of soil profiles provides an essential check on such measurements. Observations on soil texture, structure, consistency, color/mottling layering, visible pores and depth to impermeable layers such as bedrock and clay pan form the basis for deciding if permeability measurements are likely to be representative.

According to the data of soil permeability in project location shows that more than 25 cm/hour and according to the soil permeability class included in class very rapid it means if there is any oil spill, the ground water will be quickly polluted.

Figure 25. Soil Permeability Test

Soil permeability classes for agriculture and conservation

Soil permeability classes	Permeability rates[1]	
	cm/hour	cm/day
Very slow	Less than 0.13	Less than 3
Slow	0.13 - 0.3	3 - 12
Moderately slow	0.5 - 2.0	12 - 48
Moderate	2.0 - 6.3	48 - 151
Moderately rapid	6.3 - 12.7	151 - 305
Rapid	12.7 - 25	305 - 600
Very rapid	More than 25	More than 600

Sources : USDA

The proponent hasn't done a test for TPH (Total Petroleum Hydrocarbon) because of the Covid-19 situation and conditions, we will provide after normal situation.

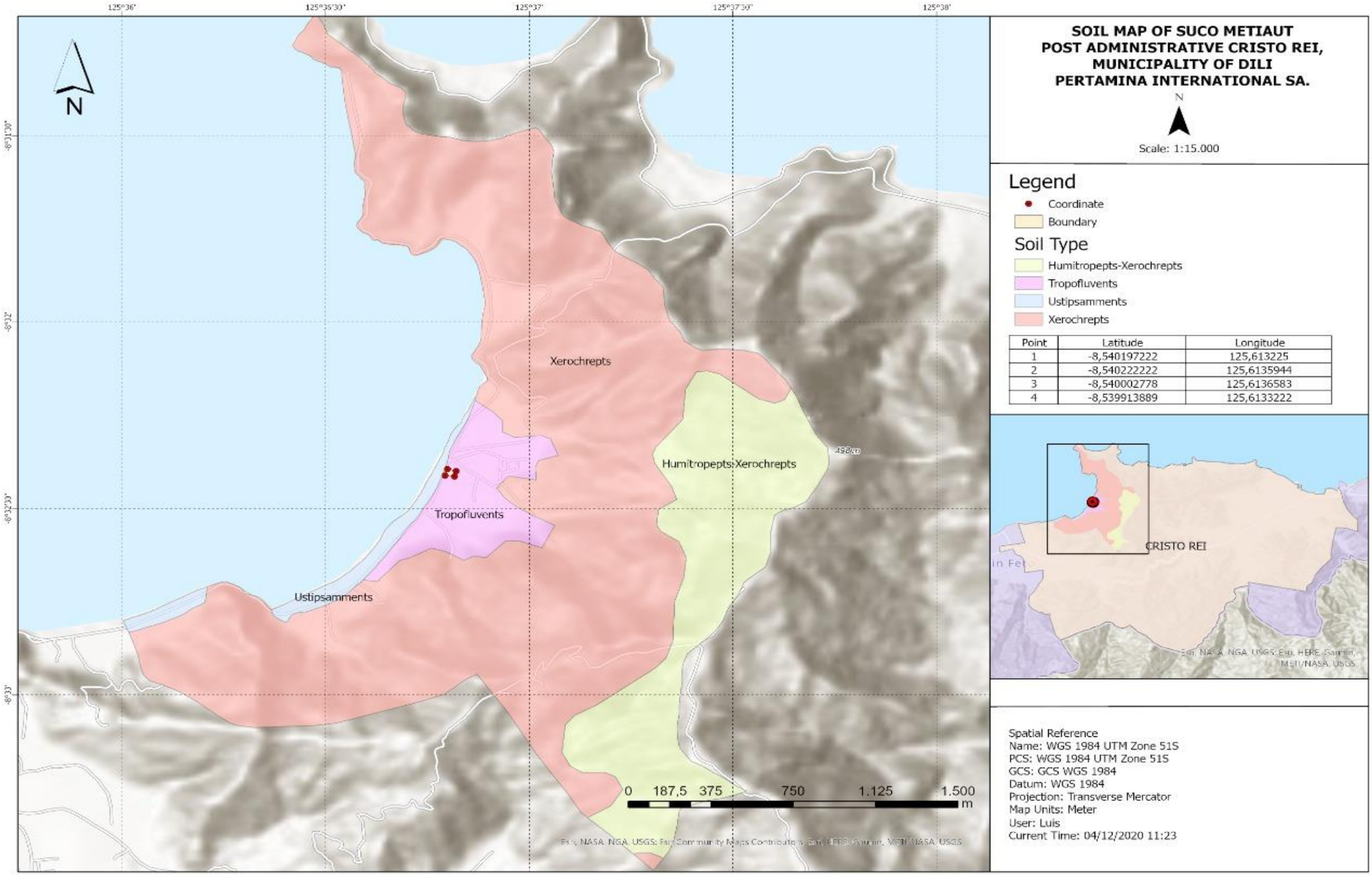


Figure 26. Soil Map (*Source : Hersege Lda 2020*)

x. Noise Level

Sound level meters are commonly used in noise pollution studies for the quantification of different kinds of noise, especially for industrial, environmental, mining and aircraft noise.

The current international standard that specifies sound level meter functionality and performances is the IEC 61672-1:2013. The first noise measurement point is inside the project area. Noise source is from the operated motor vehicle that passes through the main road and to the fuel filling area. Total of the 120 data collected from the noise level meter within the 10 minutes time frame. By using formula based on the "*Lampiran II Keputusan Menteri Negara Lingkungan Hidup No. : KEP-4/MENLH/11/1996 Tentang Baku Tingkat Kebisingan Tanggal 25 Nopember 1996*, the result of measurement is **42.48 dBA**. This number does not exceed the IFC Noise Level Guidelines for industrial activity (70 dbA) see Table 11.

Table 4. IFC Noise Level Guidelines

	One Hour L_{Aeq} (dBA)	
Receptor	Daytime 07:00 - 22:00	Nighttime 22:00 - 07:00
Residential; institutional; educational[55]	55	45
Industrial; commercial	70	70

In addition the temperature at the project location when conducted the measurement is 29^{o}C, the humidity is 66% RH, with the wind speed is 0.6 to 2.5 m/s and the wind blows from North to South.

b. Ecological Components

i. Wetlands

A wetland is a distinct ecosystem that is inundated by water, either permanently or seasonally, where oxygen-free processes prevail. The primary factor that distinguishes wetlands from other land forms or water bodies is the characteristic vegetation of aquatic plants, adapted to the unique hydric soil. There is no wetland that can be found surrounding the project area.

ii. Mangroves

Mangroves are salt-tolerant trees, also called halophytes, and are adapted to life in harsh coastal conditions. They contain a complex salt filtration system and complex root system to cope with salt water immersion and wave action. They are adapted to the low oxygen conditions of waterlogged mud. A coral reef is an underwater ecosystem characterized by reef-building corals. Reefs are formed of colonies of coral polyps held together by calcium carbonate. Most coral reefs are built from stony corals, whose polyps cluster in groups. There is no mangrove that close to the proposed project location.

Figure 27. Metiaut/Fatucama Mangroves (*Source; Hersege Lda*)

iii. Corals

Based on the survey that conducted by NOAA-CREP, the Average percent cover (standard error) of the reef benthos and benthic substrate ratio (hard and soft coral and CCA/turf and microalgae) are shown in table below:

Table 5. Average Percent Cover of Coral

District	Sites (#)	Hard coral % (SE)	Soft coral % (SE)	CCA % (SE)	Macroalgae % (SE)	Turf algae % (SE)	Sand % (SE)	Benthic Substrate Ratio
Oecusse	16	17.2 (3.0)	13.7 (3.9)	0.7 (0.3)	1.8 (0.5)	47.9 (4.6)	12.2 (2.5)	**0.9**
Bobonaro	16	14.0 (2.5)	17.8 (3.8)	2.4 (0.7)	1.5 (0.7)	54.5 (4.3)	4.7 (1.8)	**0.8**
Liquica	26	10.7 (1.6)	22.9 (3.6)	1.8 (0.7)	2.4 (0.6)	46.7 (4.7)	9.0 (1.6)	**1.4**
Atauro	22	20.5 (2.0)	10.7 (1.9)	7.7 (1.4)	5.2 (0.9)	39.8 (4.0)	4.4 (1.7)	**1.2**
Dili	14	13.2 (1.3)	24.0 (3.5)	4.6 (0.8)	2.1 (0.6)	35.4 (4.8)	13.6 (2.7)	**1.5**
Manatuto	13	17.0 (3.6)	8.9 (2.1)	2.9 (1.0)	2.2 (1.0)	51.8 (4.6)	8.7 (3.6)	**0.7**
Baucau	13	10.4 (1.8)	13.8 (4.4)	2.8 (0.7)	1.9 (0.6)	51.3 (5.0)	10.3 (3.9)	**0.7**
Lautem	19	20.3 (2.1)	6.0 (1.3)	7.2 (1.4)	9.2 (3.4)	43.7 (4.3)	7.1 (2.1)	**0.8**

iv. Fisheries

Timor-Leste is surrounded world-renowned marine resources. Fishing licenses are available to off-shore foreign operators to fish for export in the exclusive economic zone. Private sector investment has introduced prawn, grouper, and sea-cucumber farming for export markets. Many individual, small-scale operators catch a range of fish including tilapia, milkfish, groper, shrimp, seaweed and crabs. The fisheries are in Fatucama is located approximately 100 meters to the northern part from the proposed project.

Figure 28. Fisheries Area

v. Protected Areas and National Parks

On February 3rd, 2016, the Council of Ministers approved the Decree-Law on the National System of Protected Areas. This measure created the legal instruments necessary for the protection of nature, essential to the survival of traditional communities and for the expansion of ecological tourism, one of the great potential for the sustainable development of Timor-Leste.

Cristo Rei is one of the protected area of a total of 30 protected areas in Timor Leste, according to the UNTAET regulation 19/2000. Proposed project location near by Cristo Rei Statue about 1.9 km.

A total of 30 protected areas were listed in Timor-Leste; and three of them, Cristo Rei Protected Area, Tasitolu and Behau, are located in the DMA (Dili Urban Master Plan) . The NDFNC is going to review the list of protected areas. Behau will be abolished and two mangrove areas will be listed in Dili Municipality although the location details are unclear. Besides, an international NGO, Bird Life International, undertook a survey and designated Important Biodiversity Areas (IBA) to conserve important habitats of bird populations in 2007. Two IBA, Tasitulo and Areia Branca Beach and Hinterland, are located in the DMA. Mangrove trees are not lushly vegetated on the coast of Suco Tibar located at the west end of DMA.

vi. Flora and Fauna

Based on the observation in the field the flora within the project area such as:

Tamarin Tree (Sukaer), Ai Cafe, Aifuna ben, Duut Fuik, Ai Camea, Ailok and Cocos nucifera.

Figure 29. Flora within the Proposed Location

Based on the observation in the field the Fauna within the project area such as: *Artiodactyla* (*Bibi*), *Bubalus bubalis (Karau)*, *Gallus gallus domesticus (Manu)*, and dog.

Figure 30. Fauna within the Proposed Location

vii. Forest

Timor Leste's lush rain forests and hardwoods have long been a major resource for its communities. Mirroring similar trends across the world, however, the island's forest cover has decreased by an estimated 50-70%, - or by almost 30 percent between 1972 and 1999 alone. This leaves around 41 percent of Timor-Leste's land forested, with the occasional small pocket of primary forest still intact.

And yet, depletion of the country's forests is continuing. Precious hardwoods such as sandalwood or teak have been almost completely eliminated, while agricultural expansion is adding undue pressure on the remaining forest cover. Slash-and-burn farming, a practice where farmers prepare the field by burning incumbent vegetation, frequently results also in forest fires and forest degradation. Cleared land along the slopes, on the other hand, has exposed upland farming communities to landslides and soil erosion, further fueling the need to clear more land for farming.

viii. Coastal Resources

The coastal zone is essential to marine life and supports a large part of the world's living marine resources, certainly more than the open sea. Its wetlands, lagoons, sea grass beds, coral reefs and shallow bays are nursery or feeding areas for most coastal and many oceanic species.

c. Economic Components, Including

i. Employment Sector

According to the census results, there were 383,331 employed persons in 2015, against 341,694 in 2010, representing an average annual growth rate of roughly 4.8 percent. This result shows that employment grew faster than the working age population during the five-year period from 2010 to 2015. The apparent growth of employment has, however, been achieved through the growth of self-employment and particularly own-account employment. The share of own-account workers in total employment increased from 50.2 percent in 2010 to 57.3 percent in 2015, while the share of employees in total employment has remained essentially unchanged at about 31.1 percent in 2010 and 30.6 percent in 2015.

In terms of branch of economic activity, the data show that there has been a net relative decline of agriculture employment in favor of services during the period. The share of agriculture employment in total employment decreased from 68.8 percent in 2010 to 59.3 percent in 2015.

Correspondingly, the share of employment in services increased from 26.1 percent in 2010 to 35.9 percent in 2015. Industrial employment remained almost unchanged at 4.9 percent in 2010 and 4.1 percent in 2015. The occupational composition of employment has slightly changed in favor of more skill-demanding occupations, although it remains heavily dominated by agriculture and services. The data show a net increase of the share of managers from 2 percent in 2010 to 4 percent in 2015, and a significant increase in the share of professionals from 2 percent in 2010 to 6 percent in 2015. Correspondingly, the data show a decrease in the share of agriculture workers in total employment from 65 percent in 2010 to 60 percent in 2015 but a relative increase in the share of services and sales workers from 12 percent in 2010 to 15 percent in 2015.

The educational attainment of the employed population in the core age group, 15 to 64 years old, has generally increased during the five-year period. The share of employed persons with secondary education increased from 18.8 percent in 2010 to 20.3 percent in 2015. Similarly, the share of employed persons with university education increased from 5.6 percent in 2010 to 9.0 percent in 2015. The share of employed persons with primary education remained essentially constant at 19.9 percent in 2010 and 20.2 percent in 2015.

The data below also show that the share of employment in agriculture is Lower Dili as compared with the others industries in Dili. The presence of this project will create the job opportunity to the community that lives surrounding the project.

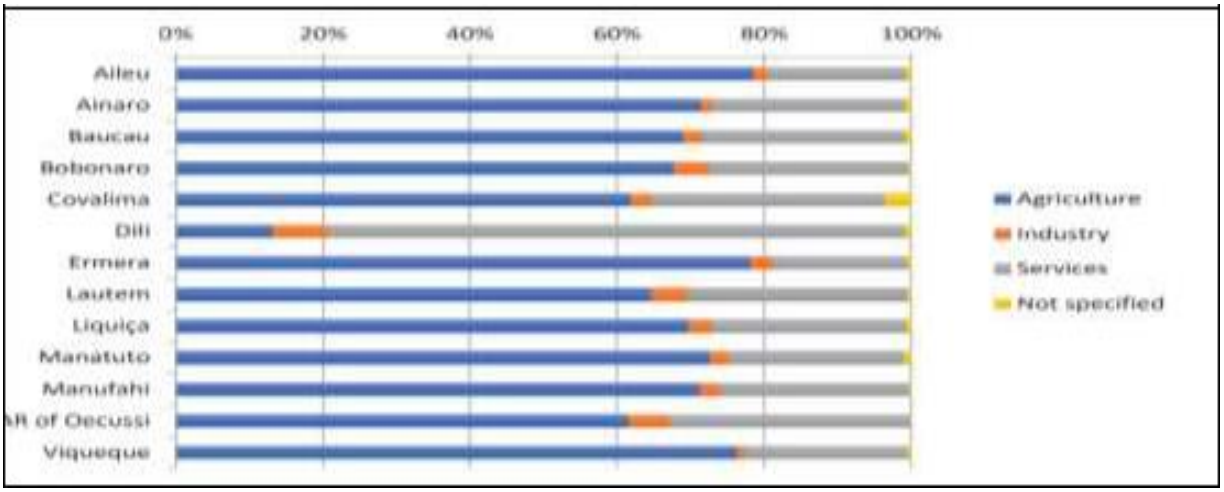
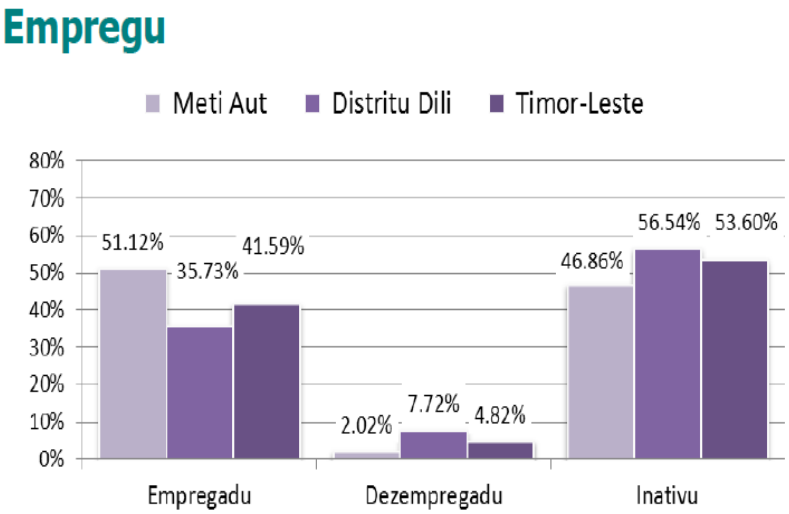


Figure 31. Composition of Employment (Source: https://timor-leste.unfpa.org/sites/default/files/pub-pdf/2015%20Census%20Labour%20Force%20Report.pdf

Following figure shows that Suku Meti Aut has employed 51.12 %, unemployed 2.02% and inactive employed 46.86% (source, Census fo fila 2010)

Besik metade populasaun Timor-Leste nian mak iha "tinan produtivu", (15 to'o 59).



ii. Infrastructure Facilities

Public investments in infrastructure sectors have an important role and one of the vital drivers of the economic growth and sustainability for a long term period. The development strategy of the VIII Constitutional Government identifies the infrastructure as one of the key elements of agricultural productivity, poverty reduction, rural development and public accessibility to the markets and services.

The Infrastructure Fund (IF) was established by the Government of Timor-Leste in 2011 as a vital financial instrument for the infrastructure development to support the country in achieving its national goals, as it is underlined in the Strategic Development Plan 2011 – 2030 to increase employment and to ensure sustainable economic growth, social transformation and to improve a quality of life, to achieve strategic objectives and to become a prosperous and strong nation.

Based on the survey in the field the type of infrastructure shows following pictures.

Access Road (2.5 meter)

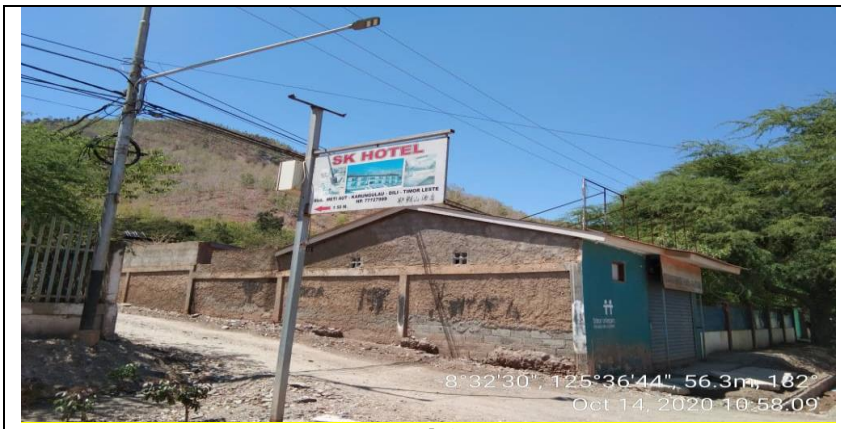
Sede Suco Metiaut (Access Road 1.70 km)

HNGV Nacional Hospital (3.5 km)

Bidau Santana Fish Market (2.4 km)

Escola Primaria Bidau Massau (3 km)

Meller Minimarket (250m)



SK Hotel (150m)

Berliku Fanun Rai Music Studio (50m)

Cristo Rei (1.9 km)

Community's Residence and Electricity Pole (50m)

Areia Branca Beach (800m)

Community's Land (50m)

Metiaut Mangrove Area (250m)

Community's Well Water (35m)

Figure 32. Infrastructure Facilities

iii. Land Use

Dili is the capital city of Timor-Leste and comprises six administrative posts, 31 sucos and 241 aldeias. The Dili Municipality accommodates a population of 234,026 (2010 Census) with annual population growth rate at 4.1% which is far above the national average growth rate (2.45%). The urban population is expected to share 30% of the national population in 2020.

According to the Land Use Survey for DMA by the JICA Project Team (hereinafter JPT) in August 2014, its result reveals that natural area including forest and natural bush covers around 74.5% of the total DMA and other predominant land use is residential and mixed residential use with other uses sharing 12.5% of total DMA land.

Based on the spatial character of DMA by the urban block, the land use of Urban Center block is occupied mainly by residential areas and government land followed by commercial & business use. The majority of land use is mountain or other natural area in the urban blocks of Center Fringe, Suburban, Hera, and Tibar as large sucos with large natural lands shared by 50%.

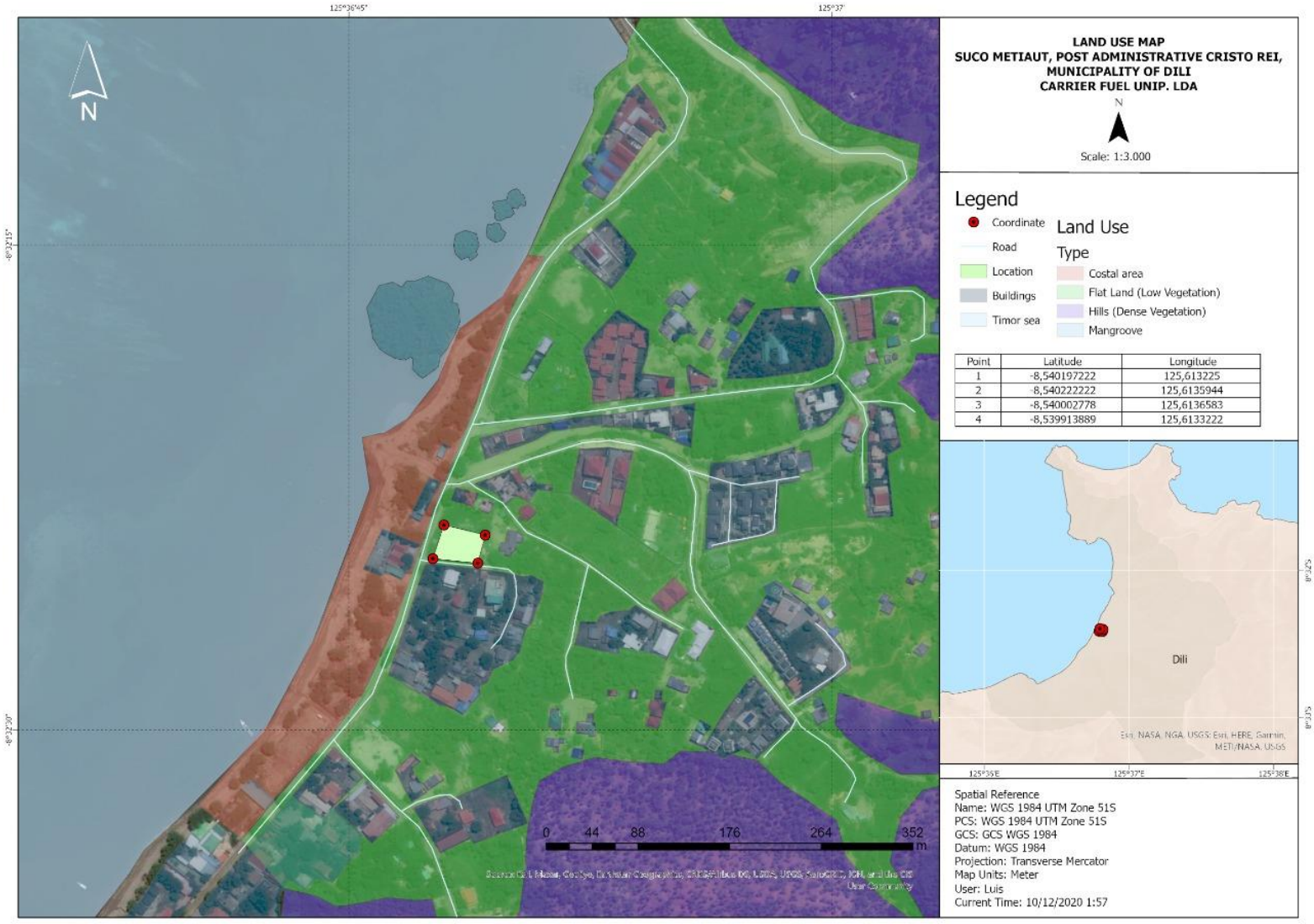


Figure 33. Land Use Map

iv. Use of Forest and Natural Resources

Besides agriculture, Timor Leste's growing population also depends on non-wood forest products, such as bamboo, rattan and grasses for housing; honey for food and medicine; palm wine; and medicinal plants. Over the last decades, the loss of forest cover has increasingly resulted in extensive soil erosion and landslides, leaving farming communities highly vulnerable and food insecure. The GEF Small Grants Programme in Timor Leste, which received a grant budget of USD 1.1 million for the current operational cycle, aims at helping communities preserve the environment and its ecosystem services upon which they rely for their livelihoods (https://www.thegef.org/news/conserving-timor-leste%E2%80%99s-rich-forest-land).

Proposed project will use natural resources such us sand, stone, backfill, water and local wood.

v. Fishing

Timor-Leste is surrounded world-renowned marine resources. Fishing licenses are available to off-shore foreign operators to fish for export in the exclusive economic zone. Private sector investment has introduced prawn, grouper, and sea-cucumber farming for export markets. Many individual, small-scale operators catch a range of fish including tilapia, milkfish, groper, shrimp, seaweed and crabs. The fisheries are in Metiaut is located approximately 50-80 meters to the northern part from the proposed project.

Figure 34. Fishing Area

vi. Agriculture

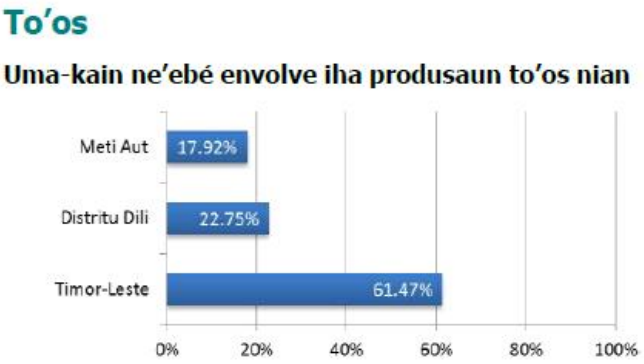
Agriculture is the main activity in Timor-Leste, providing subsistence to an estimated 80 percent of the population. It also generates an average of 90 percent of the country's exports, mainly due to coffee. Most farmers practice subsistence farming, planting and harvesting what they need for a simple life-style, collecting wild foods and traditional medicines, and the animals are very much left free to grow and reproduce. There are almost no large-scale farms except for missions. Most Timor-Leste farmers have limited access to the technologies and practices needed for sustainable and efficient agricultural production. Subsistence and commercial producers face significant constraints, including limited access to quality inputs, low yields, and limited access to markets.

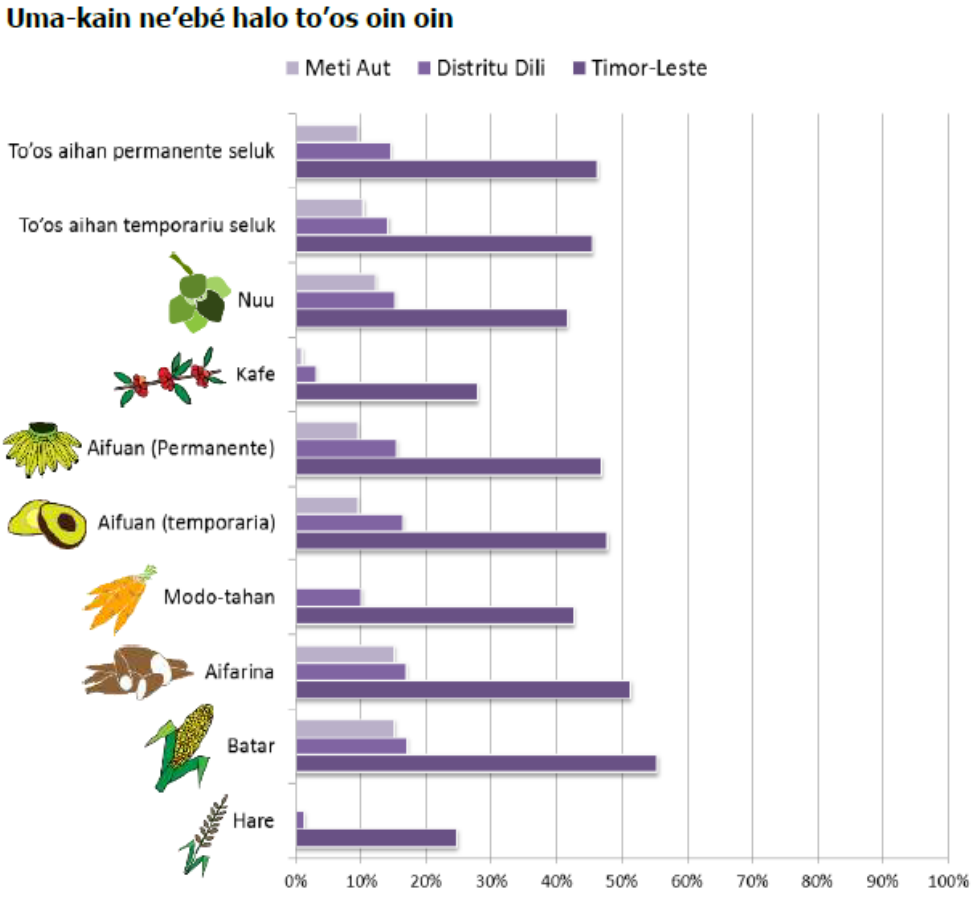
Agriculture continues to be the second largest single sector in the Timor-Leste economy, after the mining and quarrying sector. In recent years its contribution to the

country's Gross Domestic Product (GDP) has ranged between 6.4 percent in 2011 to 10.9 percent in 2014 and was 9.1 percent in 2015 (Timor Leste Agricultural Census 2019).

According to the Census fo fila 2010 percentage of agriculture in suku Meti Aut in picture bellow.

Liu metade uma-kain iha Timor-Leste kuda batar no um quarto kuda hare.





vii. Tourism

Dili municipality life's in the northtern part of Timor-Leste and includes its Capital or first largest city in Timor Leste. Set on a breezy plateau overlooking the sea, Dili has a

oldest town centre with bustling sprawling market and an older center with a much more sedate air.

The attractive older part of town derives a decidedly Portuguese flavour from the *Edefisiu Do Governador de Portugues em Dili* and other colonial buildings, some restored such as the beautiful old market square and office. This area is backed by steep limestone outcrops and shaded by large banyan tree and rustling palms. A clear freshwater spring feeds the large municipal Areia Branca Beach–a great place to enjoy a refreshing dip. beside the winding road from Dili, there is the small village of Fatucama-Areia Branca, Cristo Rei, and Dolok Oan and an absolutely breathtakingly beautiful coastline of white sand coves and beaches, stretching both east.

From the Dili plateau impressive mountain ranges including Mt Cameia Ulun in Cristo Rei Post Administrative (1848m) dominate the skyline. This 'Mountain of Spirits' is protected and considered sacred by the Timorese people. Climbing towering Mt Cameia Ulun nuous undertaking. Towards the summit stunted alpine vegetation gives way to wind sculptured fluted rock pinnacles and hikers are rewarded with stunning views of the northtern part of Timor-Leste.

Driving through the rolling Dili City some areas seem almost untouched while others are used for Big Buildings Fisheries Area, and Rest Area such as Fish Shop, Shoping Center and beautifull of the Beach. Wonderful fresh fruit and vegetables are available selling roadside in Bidau Lecidere.

Very famous tourist attractions on the outskirts of Dili are White Sand Beach and Cristo Rei, some of these tourist icons are very famous for their beautiful beaches, and for religious tourism purposes for Christians, it is the statue of Cristo Rei. Destinations to these tourist attractions are not so far from the city center of Dili, can be reached using motor vehicles, bicycles, or public transportation or cars. For the Carrier Fuel Station project it is located on the side of the road to the White Sand Beach and Cristo Rei, the distance from the project area to the tourist attractions is about 800 meters until 2 kilometers.

Mt. Cameia Ulun | Cristo Rei

Figure 35. Tourism in Dili

d. Social Components

i. Population and Communities

✓ **Numbers**

Suco Metiaut is one of seven Sucos in the post Administrative of Cristo Rei. Suco Metiaut is classified as urban Suco in Cristo Rei Post Administrative. Based on census in 2015, the total population in Suco Metiaut is 2,704, the total area is 4.61 km^2 and density is 449.8/km^2.

✓ **Locations**

Post Administrative Cristo Rei is one of six posts Administrative in Dili Municipality. Post Administrative Cristo Rei is 5 Km of Dili Municipality. Post Administrative Cristo Rei consists of seven Sucos such as: Balibar, Becora, Bidau Santana, Cameia, Culu Hun, Hera and Metiaut.

✓ **Composition**

Dili is the first largest district in Timor Leste with a population of about 175,541 inhabitants (2015 Census). Local languages spoken in Dili include Tetum for the majority. A number of people above 80% understand Portuguese and most of the others, including the younger population generally understand Bahasa Indonesia. Portuguese is being taught in all schools and some English in the secondary.

ii. Health Profiles of Communities

Tokoh Baru Hospital or better known today as Guido Valadares National Hospital. HNGV Hospital is located in Bidau Village, the hospital is the second iconic public hospital in Timor Leste after the first hospital, the Lahane Hospital was built. HNGV hospital is the main hospital or national hospital which is now used for the treatment of serious illnesses and certain diseases that cannot be treated at small clinics in various villages in the territory of Timor Leste. while for the construction of a small hospital or health clinic from the sub-district to the village in the territory of Timor Leste. however, the HNGV hospital is still the main choice for the people of Timor Leste for treatment, undergoing major surgery, health check-ups and other needs for people living in Dili and from other regions.

Figure 36. HNGV Health Center

iii. Institution, Schools and Health Facilities

Taking both public and private schools, there are 92 primary schools, 32 junior high schools and 17 secondary schools. With regard to health facilities, there are 33 health posts and six community health centers and a hospital in Dili town. Access to facilities, based on average traveling times and average distance, is good with both the nearest health center and secondary school being between half and three-quarters of an hour away and the nearest primary school being half an hour away.

The district has the lowest malnutrition rate for children under five years old, but the morbidity rate is one of the highest in the country at 24% (*IPP691 Compliance with World Bank's Operational Policy 4.10 on Indigenous People).*

iv. Community Structure, Family Structure

The traditional Timorese culture - so well defended during the resistance period, and that served to help defend the argument for independence, due to the cultural difference regarding the occupying people – is based on the complexity of the family structure practiced in Timor-Leste.

It is a very particular structure, often misunderstood by the malae (foreigners). It is no accident that even people that do not know each other, in Timor-Leste – and that which is already being used by the malae - call themselves by mana or mao (if age or social situation is similar for women and men, respectively), tia or tio (whether it is someone older, a generation or two), avó or avô (if of an advanced age).

In practice, children, godchildren, cousins or persons from the same connection in the traditional structure, are considered immediate family, a situation that reflects the central structuring role of family ties in the Timorese society.

"The bond of kinship provides a long-term perspective, which lacks in other relationships. The permanence of family relationships, usually guaranteed by a biological link, allows, in a greater extent, to build trust and mutual commitment. Anchors are created - material and emotional - between individuals and their families. This means that a strong bond exists in society, which has guaranteed the well-being of families, in extended families such as the ones that exist in the Timor-Leste traditional structure.

v. Land Ownership (including informal or customary land ownership, and other rights over the land)

The designed land for the proposed project of Carrier Fuel Unipessoal Lda is a Gov ernmentland and the project owner rented the land from the government for the long ter m. For details information and legal documents attached.

e. Cultural Components, Including non-physical Resources and Elements, Including

i. Cultural Heritage

Timorese cultural heritage is multi-layered–a fascinating combination of traditional Timorese, Portuguese, Chinese and Indonesian influences. This permeates their local architecture, cuisine, clothing styles and artistic endeavors.

Timorese culture continues to evolve in local arts and handicrafts, as well as in dance and music. Cultural motifs, both old and modern, are incorporated into the design of tais – hand-woven textiles, basket work and wood carving. Cultural groups still perform traditional dances and songs and also are entertaining in new ways. Talented Timorese bands and dance groups perform in local venues and at festivals.

Traditional culture in all its forms is still evident in everyday life in the Districts of Timor-Leste, despite colonization, war and invasion. Handed down by the ancestors these traditional beliefs and practices maintain social order, define kinship relationships and maintain a close and personal link with the land and the sea.

They also serve to maintain a sense of identity and belonging for the different ethnic groups. Whilst there is a degree of commonality amongst these beliefs and practices each clan has its own unique culture and language, making Timor-Leste a fascinating place to visit. Uma *luliks*, sacred houses, are at the center of traditional belief; they are the spiritual and ancestral home of the Timorese and hold the sacred objects that have been passed down from the ancestors. Sacred altars containing ancestral remains and places for animal sacrifice are often all that remain of many original *Uma Lulik* sites.

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During pre-colonial times Timor-Leste society was organized into chiefdoms maintained by a complex system of marital and economic alliances. Liu Rai, kings ruled over these territories. There are numerous recorded and relayed instances of feuds and wars relating to land and marriage disputes during this time.

‘Ai toos’, sacred timber markers mark territorial clan boundaries and locations where ancient treaties were enacted, older clan members still respect these boundaries The importance of the Liu Rai was strengthened during Portuguese times when their authority was reinforced by the Portuguese who ruled through them, thus preserving this aspect of Timorese culture.

Catholicism, while introduced during Portuguese colonial times, only became an integral part of Timorese culture following the invasion by Indonesia. The reason for this has been explained as the advocacy and promise of protection afforded by the church. (Molnar A. 2005).

Since that time Catholicism has coexisted alongside traditional spiritual beliefs, the Catholic Church has pragmatically tolerated this duality. With an estimated 98% of Timorese being Catholic, religious ceremonies, churches and artifacts are important aspects of Timorese culture that are likely to attract cultural tourism of a religious nature. Local languages spoken in Dili include Tetum for the majority, a number of people above 40 understand Portuguese and most of the others, including the younger population generally understand Bahasa Indonesia. Portuguese is being taught in all schools and some English in the secondary.

ii. Archeological Sites

An archaeological site is a place (or group of physical sites) in which evidence of past activity is preserved (either prehistoric or historic or contemporary), and which has been, or may be, investigated using the discipline of archaeology and represents a part of the archaeological record. Sites may range from those with few or no remains visible above ground, to buildings and other structures still in use. There is no archeological site that founded around the project location.

iii. Historical Sites

Cristo Rei of Dili (Christ the King of Dili) is a 27.0 m high (88.6 ft) statue of Jesus located atop a globe in Dili, Timor Leste. The statue was designed by Mochamad Syailillah, who is better known as Bolil. The statue was officially unveiled by Soeharto in 1996 as gift from the Indonesian Government to the people of Timor Leste, the then Indonesian province. The statue is one of the main tourist attractions in Timor Leste.

The statue, and the globe on which it rests, are situated at the end of the Fatucama peninsula, facing out to the ocean and can be reached by climbing some 597 steps.

The idea of raising the *Cristo Rei* statue was proposed by the East Timor governor José Abílio Osório Soares to President Suharto. It was intended as a present for the 20th anniversary of East Timor's integration into Indonesia.

Suharto appointed the director of national airline Garuda Indonesia to lead the project. Garuda was given the responsibility to find capital for funding the project, and raised 1.1 billion rupiah (US$123,000). However, that was not sufficient to erect the statue, and contributions from East Timorese civil servants and businessmen were needed to complete the project, which eventually cost more than 5 billion rupiah (US$559,000).

It took almost a year of working to create the body of the statue, which was fabricated by 30 workers in Sukaraja, Bandung. It was made of 27 separate copper sections, which were then loaded onto three trailers and shipped to Dili. Reconstruction of the statue, including the globe and a 10-meter-high cross, took three months.

It was unveiled on 15 October 1996. Roman Catholic bishop Carlos Filipe Ximenes Belo, together with President Suharto and Timor Leste Governor José Abílio Osório Soares, directly witnessed the revelation of this statue from the air using a helicopter.

iv. Sacred Sites

Cristo Rei considered as Sacred Sites by Catholic people, The Catholic Church in Timor Leste is part of the worldwide Catholic Church, under the spiritual leadership of the Pope in Rome. Since its independence from Indonesia, East Timor became only the second predominantly Catholic country in Asia (after the Philippines), a legacy of its status as a former Portuguese colony. About 98.3% of the population is Catholic in East Timor as of 2006, which means over 900,000 faithful.

The country was divided into three dioceses: Dili, Baucau and Maliana (erected in 2010). These dioceses are immediately subject to the Holy See.

The Apostolic Nuncio to East Timor is concurrently the nuncio to Indonesia. The position has been vacant since 11 October 2019, and the Nunciature is located in Jakarta.

v. Unique Landscape

No unique landscape near proposed location

7. ALTERNATIVES

a. Alternative Location

Alternatives to the project location will be presented in this section, as well as the historical use of the overall area in which the project site is located. These alternatives will be discussed from environmental and socio-economic perspectives.

Based on the preliminarily identification of feasibility study for the proposed location, there is no project alternative and the alternative locations are not the applicable alternatives to the project. In fact, the current location for the proposed fuel filling station is most reasonable aspect as it has been setup with the feasibility study assessment which concludes that the current location for the project site is acceptable.

b. Different Project Sizes or Design

Based on the current project design that submitted to the ANPM is a suitable design that company proposed due to the condition in the field.

c. Alternative Technologies/ Methods

Automated payments technology could invite consumers to link their debit or credit cards in a once-off registration process, and then fill up at any time.

8. CLIMATE CHANGE

a. Description of Historic Weather

The climate is tropical in Dili. The summers here have a good deal of rainfall, while the winters have very little. According to Köppen and Geiger, this climate is classified as Dwb. The Köppen climate classification divides climates into five main climate groups, with each group being divided based on seasonal precipitation and temperature patterns. The five main groups are A (tropical), B (dry), C (temperate), D (continental), and E (polar). In Dili, the average annual temperature is 27.0 °C. In a year, the average rainfall is 1307 mm.

b. Details of Future Projection Under Projected Climate Change

The proposed project would emit carbon dioxide (CO2) from during construction and operation period. The emission emitted during the time of construction is directly through fuel use in construction vehicles and equipment, and there is in direct emission from generator usage when electrical power off. These are the future projection for climate change.

Future climate predictions for the course of the 21st Century (BoM CSIRO, 2011) include the following:

- Surface air temperature and sea-surface temperature are projected to continue to increase (very high confidence);
- Wet season rainfall is projected to increase (moderate confidence);
- Dry season rainfall is projected to decrease (moderate confidence); • Little change is projected in annual mean rainfall (low confidence);
- The intensity and frequency of days of extreme heat are projected to increase (very high confidence);
- The intensity and frequency of days of extreme rainfall are projected to increase (high confidence);
- Little change is projected in the incidence of drought (low confidence);
- Tropical cyclone numbers are projected to decline in the broad region surrounding Timor Leste (0–20ºS and 100ºE–130ºE) (moderate confidence);
- Ocean acidification is projected to continue (very high confidence); and
- Mean sea-level rise is projected to continue (very high confidence)

c. Implication for the Proposed Project

The project will be implemented after the proponent obtain license from government including environmental license.

d. Adaptation measures required to mitigate any potential adverse impacts

The impacts of the proposed alteration project on the environmental elements are both positive and negative. The magnitude of each impact is described in terms of being significant, minor or permanent, short-term or long term, specific (localized) or widespread, reversible or irreversible. Most of the impacts have been addressed in the proactive design of the project and other mitigations can only be guaranteed through active and responsible management committed to the propositions of the environmental management plan.

9. IMPACTS ASSESSMENT AND MITIGATION MEASURES

Table 6. Impacts Assessment and Mitigation Measures

Pre-Construction

Activities	Impacts	Parameter/ particular concerns	Preventive action	Control and responding action	Corrective action
• Land clearing • Vehicles movements • Use of heavy of machinery for land clearing and excavation • Wastes production and burning	**Air quality**	*Dust (particulate matter) and Flue gasses/ exhaust gasses impact on air quality*	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Proper pilling of soil from earth work • Build fence around the project site to isolate dust to spread to surround • Installation of signage inside and outside the facility to inform general traffic those construction vehicles might make an access in and out of the facility. • Suspend or Stop the work when it is windy if required to • Daily Check and maintenance to the equipment before be utilized to avoid emission to the air • Reduce vehicle's speed to minimise flue gasses emission and dust from suspend in the air • Turn off unnecessary idling of vehicles and machineries' engines • Waste materials shall not be burned on working area and disposed to the designated area. • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce the vehicle speed to minimize flue gasses emission and dust from suspend in the air • Suspend or Stop the work when it is windy • Construction equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order. • Clean the wastes and disposed at the designated location • Appointing designated personnel to supervise the activity	• Re-planting trees after construction at the suitable and designated location • Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Conduct maintenance to vehicles regularly • Regular inform the drivers to operate vehicles according to established speed • Regular inform workers to manage and dispose the wastes of at the designated location • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity

• Land clearing • Vehicles movement and excavation • Use of heavy machinery for land clearing and excavation • Vehicles movements • Wastes production and burning	**Workers' Occupational health and Safety (OHS)**	*Dust (particulate matter) impact on Workers* *Flue gasses/ exhaust gasses impact on Workers*	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Proper pilling of soil from earth work • Installation of signage inside and outside the facility to inform general traffic those construction vehicles might make an access in and out of the facility. • Suspend or Stop the work when it is windy • Proper PPE should be worn by the Workers • Daily Check and maintenance to the equipment before be utilized to avoid emission to the air • Reduce vehicle's speed to minimise flue gasses emission and dust from suspend in the air • Workers should spend less time next to idling engines • Turn off unnecessary idling of vehicles and machineries' engines • Wastes should not be burnt in the project area, but managed properly and disposed of at designated location • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce the vehicle speed to minimize flue gasses emission and dust from suspend in the air • Suspend or Stop the work when it is windy • Construction equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order. • Clean the wastes and disposed at the designated location • Appointing designated personnel to supervise the activity	• Proper PPE should be worn by the Workers • Re-planting trees after construction at the suitable and designated location • Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Conduct maintenance to vehicles regularly • Regular inform the drivers to operate vehicles according to established speed • Regular inform workers to manage and dispose the wastes of at the designated location • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity
• Land clearing and excavation		*Workers exposure to extreme heat*	• Workers must adjust exposure until body is acclimated to the heat • Minimize exposure to hazard through workers rotation and limitation to working hours • Regular drinking to maintain an adequate hydration level • Ensuring a good quality rest period prior to attending work • Workers must wear proper PPE • Provide an adequate rest area • Provide and display the emergency contact list in the working area	• Wearing clothes that allow sweat to evaporate • Immediate treat workers suffer from unserious heat stress • Immediate Evacuate the workers from serious heat stress to hospital or clinic • Appointing designated personnel to supervise the activity	• Proponent must provide proper PPE to all Workers • The worker should be recovered completely before continue to work • Fair Compensate the workers if necessary • Provide and display the emergency contact list in the working area • Appointing designated personnel to supervise the activity
• Land clearing using heavy		*Workers injury*	• Proper PPE should be worn a before conducting a task	• Stop or suspend the work temporarily when there is	• Provide PPE for all Workers

machineries • Vehicles movements during land clearing and excavation		*related to accident (vehicles, heavy duty equipment, etc.)*	• Ensure Workers are fit prior to undertake any works • Proponent should properly hiring a qualified/ experienced and healthy person • First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • Build fence around the project to prevent unauthorized people entering to the work site • Human traffic to be directed away from the construction works site using appropriate signage. • Assigned tasks to Workers based on their skill and knowledge • Provision of training for proper equipment handling and safety precaution for equipment handling • Provide and display the emergency contact list in the working area. • Appointing designated personnel to supervise the activity	accident or incident • Immediate treat workers unserious injured Workers • Immediate evacuate the serious injured Workers to nearest hospital or clinics or call ambulance for evacuation assistance • Appointing designated personnel to supervise the activity and the injured Workers	• Provision of training to specific job • First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • The worker should be recovered completely before continue to work • Provide and display the emergency contact list in the working area. • Fair compensate the Workers if necessary • Appointing designated personnel to supervise the activity
• Use of heavy machinery during land clearing and excavation		*Workers mechanical related works accident or incident*	• Proper PPE should be worn a before conducting a task • Proponent should properly hiring a qualified/ experienced and healthy person • Provision of training for proper equipment handling and safety precautions for equipment handling Prevent body to contacting hazardous moving parts • Ensure no objects can fall into moving parts • First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • Appointing designated personnel to supervise the activity	• Suspend or stop the work temporarily when people Workers are injury • Apply first aid to treat the unserious injured Workers properly • Immediate evacuate the serious injured Workers nearby hospitals or clinics or call ambulance for evacuation • Appointing designated personnel to supervise the activity and injured Workers	• Provide PPE for all Workers • Provision of training to specific job • First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • The worker should be recovered completely before continue to work • Provide and display the emergency contact list in the working area. • Fair compensate the Workers if necessary • Appointing designated personnel to supervise the activity
• Use of heavy machinery		*Noise impact to Workers*	• Proper PPE should be worn a before conducting a task	• Control noise level should not exceed the limit	• Utilized equipment with one lower noise

during land clearing and excavation			• Utilized equipment with one lower noise emission to ensure that the permissible occupation noise-rating limit of 85 dBA is not exceeded. • The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Barricade or Install fence around the project site to isolate the noise • Appointing designated personnel to supervise the activity	• Workers should wear proper PPE • Appointing designated personnel to supervise the activity	emission • Provide workers to wear proper PPE • Appointing designated personnel to supervise the activity
• Vehicles movements during land clearing and excavation • Land clearing • Use of heavy of machinery for land clearing and excavation • Wastes production and burning	**Social impact (community health and safety)**	*Dust (particulate matter) and Flue gasses/ exhaust gasses impact on community*	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Proper pilling of soil from earth work • Build fence around the project site to isolate dust to spread to surround • Installation of signage inside and outside the facility to inform general traffic those construction vehicles might make an access in and out of the facility. • Suspend or Stop the work when it is windy if required to • Provide a proper PPE to the community that live around the project site • Daily Check and maintenance to the equipment before be utilized to avoid emission to the air • Reduce vehicle's speed to minimise flue gasses emission and dust from suspend in the air • Turn off unnecessary idling of vehicles and machineries' engines • Waste materials shall not be burned on working area and disposed to the designated area. • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce vehicle speed to minimize flue gasses emission and dust from suspend in the air • Suspend or Stop the work when it is windy • Suspend or stop to work temporarily when receive any complaint from the community • Resolve the complaint in a proper manner before resume to work • Contact the police if physical confrontation involved during the complaint • Construction equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Clean the wastes and dispose of at the designated location	• Re planting trees after construction at the designated location within the facility • Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Prepare and archive the report on complaints • Prepare and provide PPE to community live around the project site • Conduct maintenance to equipment and vehicles regularly • Regular Inform the drivers to operate vehicles according to established speed • Regular Inform workers manage and dispose the wastes of at the designated location • Proper wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity

				• Appointing designated personnel to supervise the activity	
• Companies Vehicles movements outside project area during site preparation • Land clearing • Excavation		*Traffic Jam and Traffic accident (general traffic)*	• Organize the movement of vehicles on and off site to minimize risks and prevent congestion on roads in the vicinity of the site. • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Large vehicle movement must be taken place in appropriate location where it does not cause traffic jam • In cases where activities may obstruct traffic, local traffic officials/police officer must be contacted. • Proponent should properly hiring a qualified/ experienced and healthy person • Installation of signage near the facility to inform general traffic those construction vehicles might make an access in and out of the facility. • Reduce number of construction vehicle leaving the site during peak hours • Clear markings to set apart vehicle and pedestrians routes right outside the project site • Provide designated safe zones for drivers to stand when unloading/loading activity is being undertaken. • Frequently held training and inform on traffic safety and follow up drivers driving attitude to respect the safety and follow the speed limit. • Ensure that drivers are competent to operate the vehicles safely. • Manage the work hours and duration for drivers to minimize fatigue. • Implement a one-way system to reduce the need for vehicles to reverse on site. • Provision of adequate protection to the general public in the vicinity of the work site, including installing safety barriers if required by villagers and signage or marking of the work areas. • Establish a speed limit to the driver driving outside the project area. • Established parking area outside of the project area should not cause traffic jam	• Reduce number of construction vehicle leaving project site during peak hours • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Frequently held training and inform on traffic safety and follow up drivers driving attitude to respect the safety and follow the speed limit • Driver should inform the project manager or person in charge immediately when an accident or incident occur • Treat small injury immediately • Maximum supervision from project manager on the activity	• Proper management plan for vehicle movement • Assign staffs to smoothen the traffic outside the facility • Reduce number of construction vehicle leaving the site during peak hours • Driver must aware of Emergency contact numbers in the car must be made available at project site • Fair compensate the victims of vehicle accident if necessary • Maximum supervision from project manager on the activity

			• Provide emergency contact number in the vehicles and make drivers aware of it • Maximum supervision from the project manager on the activity		
• Vehicles movements in the project area during site preparation • Land clearing and excavation		*Noise and vibration impact to community*	• Inform affected communities well in advance for the nuisance and Contact all relevant local authorities for utilities and local village groups • Operation of noise generating equipment should only be during the day. • Utilized equipment with one lower noise emission to ensure that the permissible occupation noise-rating limit of 85 dBA is not exceeded. • The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Isolate noise source by enclosing with barriers upon discussion with the management • Reduce heavy machinery and vehicles movements inside the facility, into or out of the facility • Use low noise and vibration equipment • Maximum supervision from the project manager on the activity	• Stop or suspend the work temporarily when there is complaint from the community • Resolve complaints from the community in a proper manner • Inform the relevant authorities if there is physical confrontation involved during the complaint • Control noise level should not exceed the limit • Carry out the work in working hours only • Use low noise and vibration equipment • Reduce heavy machinery and vehicles movement inside the facility, into or out of the facility • Maximum supervision from the project manager on the activity	• if possible use equipment with low noise • Maximum supervision from the project manager on the activity • Carry out the work in working hours • Use low noise and vibration equipment • Reduce heavy machinery and vehicles movement inside the facility, into or out of the facility • Maximum supervision from the project manager on the activity
• Leaking of fuels and lubricants from the heavy machinery and vehicles	**Soil quality, Water quality (both groundwater and surface water)**	*Soil, surface and groundwater pollution*	• Daily Check to the equipment to ensure the condition of the equipment all construction vehicles and heavy machineries should be properly maintained to prevent leaks. • Any spill or accidental leakage of the substance has to be cleaned up promptly. Operator should have in place procedure, equipment as well as material suitable to clean up oil leaks either on the ground or in the surface water. Contaminated water or soil should be disposed-off at oil disposal site. • Inform the relevant environmental authority • Ensure availability of spill clean-up materials (e.g., Absorbent pads, etc.) specifically designed for	• Project manager or person in charge should be informed when construction vehicles or heavy machineries leak • Leaking construction vehicles or heavy machineries should undergo maintenance right away when it is found. • Change the broken equipment with the well maintained equipment • Maximum supervision from	• Prepare emergency response plan • Ensure availability of spill clean-up materials (e.g., Absorbent pads, etc.) specifically designed for petroleum products and other hazardous substances Remediation must be undertake when contamination is detected • Maximum supervision

			petroleum products and other hazardous substances Maximum supervision from the project manager on the activity	the project manager on the activity	from the project manager on the activity
• Poor management during excavation and land clearing		*Soil and surface water pollution*	• Provide appropriate drainage systems to manage surface runoff. • Install sediment retention structure around the project site to capture sediments in the raining season • Minimize the vehicles movement during raining season • Maximum supervision from the project manager on the activity	• Install sediment retention structure around the project site to capture sediments in the raining season • Minimize vehicles movement during raining season • Maximum supervision from the project manager on the activity	• Install sediment retention structure around the project site to capture sediments in the raining season • Minimize vehicles movement during raining season • Maximum supervision from the project manager on the activity
• Land clearing	**Ecology impact**	*Impact on animals Vegetation and animals*	• Works had been done restricted to the approved boundary. • Avoid cutting to trees that are not in the project area and that do not interfere with the site preparation • Avoid removing grasses that are not in the project are and that do not interfere with the site preparation • Use of guns and hunting equipment by workers will be banned and dismiss workers taking or using green timber or hunting or in possession of wildlife during site preparation • Maximum supervision from the project manager on the activity	• Avoid removing trees and grasses that are not in the project are and that do not interfere with the site preparation • Use of guns and hunting equipment by workers will be banned and dismiss workers taking or using green timber or hunting or in possession of wildlife • Maximum supervision from the project manager on the activity	• Replant appropriate grass and trees in the project area after the construction • Maximum supervision from the project manager on the activity
• Land excavation • Land clearing	**Geological impact**	*Disturbance of soil and rock*	• Utilize appropriate excavation equipment • Excavate in the designated planned location • When find any minerals, relevant authority should be notified • The stock pile of soil and rock should put at	• Suspend or stop the work temporarily when a mineral is found while excavating and notify the relevant authority • Resume the work if an investigation to the	• Minimized used of heavy equipment by manual excavation • Maximum supervision from the project manager on the activity

			designated location • Suspend or Stop the work when it is raining • Maximum supervision from the project manager on the activity	location is done • Maximum supervision from the project manager on the activity	
	Economic and agricultural impacts	*Impact on economic and agriculture activities*	• Inform the landowners before dumping soil or rock and other materials on lands • Avoid dumping soil or rocks and other material on community agricultural land • Adequate signage and security provided at the site • Wastes should be managed properly and disposes at designated location • Maximum supervision from the project manager on the activity	• Suspend or stop the work temporarily when these is complaint • Resolve the complaint in a proper manner • Inform the relevant authorities if there is physical confrontation involved during the complaint • Clean the wastes and disposed at the designated location • Maximum supervision from the project manager on the activity	• Let the relevant authority investigate people of involve in physical confrontation • Fair Compensate if necessary • inform the workers to manage and dispose wastes at designated location • Maximum supervision from the project manager on the activity

		(2)	Implementation of proper procedure for refueling and oil change where leaks and spill are minimized. Provision of areas lined with concrete to contain any spill from lubricant and fuels.	
		(3)	Other potential hazardous materials for construction purposes such as lubricants and chemical compounds should be stored in shelter areas with ground lining and kept in amount that called out by storing specifications.	
		(4)	Any spill or accidental leakage of the substance has to be cleaned up promptly. Operator should have in place procedure, equipment as well as material suitable to clean up oil leaks either on the ground or in the surface water. Contaminated water or soil should be disposed-off at oil disposal site.	
		(5)	Provide appropriate drainage systems to manage surface runoff.	
		(6)	Landscaping: Re-surface open areas on completion	
Social Impact	Minimize negative, impact during construction period only	(1)	Consultation, respect local rules of conduct and tradition,	Surveillance, Visual Inspection and Interview
		(2)	Prioritize hiring worker from nearest surrounding community,	
		(3)	Adequate signs and site security	
		(4)	Immediate contact the emergency number if something unexpected happens.	
Occupational Health and Safety	Minimize occupational risk to employees, health and safety risks to the customers and the surrounding community	(1)	Build fence to prevent unauthorized people entering to the work site	Training certificates
		(2)	Human traffic to be directed away from the construction works site using appropriate signage.	
		(3)	First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident	Safety and protection zone
		(4)	Construction worker should wear proper PPE to do the task.	
		(5)	Minimize exposure to hazard through workers rotation and limitation to working hours (max. 8 hrs)	

		(6) (7)	Provision of training for proper equipment handling and safety precautions for equipment handling Adequate supervision for handling of heavy machinery	
Noise Impact	Reduce the noise impact	(1) (2) (3)	All noise-generating equipment should be insulated and well maintained to ensure that they operate within the noise limits they were designed to operate. Operation of noise generating equipment should only be during the day Provision of personal protection measures from noise to workers	At discretion of all the staffs
Traffic associated with vehicle movement on site	Reduce any possible traffic congestion and vehicular impact	(1) (2)	Installation of signage near the facility to inform general traffic those construction vehicles might make an access in and out of the facility. Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement	Surveillance by the staffs

Operation Phase

Activity/Aspect Description	Objective		Mitigation Measures Commitments/ Actions/ Controls	Parameters for Monitoring
Air Quality	Minimize impact on air quality, which resulted from the release of volatile organic compounds (VOC) – petrol vapor,	(1) (2) (3) (5)	Underground storage tanks to be fitted with respirators or vent lines and they are to be fitted such that facing away from the neighboring residential areas and have a minimum height of 4 meter above ground level Make sure that underground tank seals are kept in good condition and caps are appropriately sealed **Pressure Vacuum vents** are installed on the top of vent pipes from underground or aboveground fuel-storage tanks. The vent cap and internal wire screen are designed to protect the tank vent lines against intrusion and blockage from water, debris or insects Pressure/Vacuum Relief Valves are protection devices typically mounted on a nozzle opening on the top of a fixed roof atmospheric storage tank. Their primary purpose is to protect a tank against rupture or implosion by allowing the tank to breathe, or vent, when pressure changes in	Visual inspection

			the tank due to normal operations (Recommended)	
		(6)	Unloading of fuel to storage tank particularly gasoline is recommended to be undertaken during early morning/noon to minimize the generation of vapor from tanks and tankers that can trigger fires/explosion in the facility	
		(7)	A competent person must remain near the tanker during unloading	
		(8)	Regular monitoring to detect leaks and implementing repairs within predefined period	
		(9)	Ensure that fuel nozzles cut off automatically when tank is full	
		(10)	All staffs should ensure that dispensers hoses are not laid down on the pump island floor at any time	
	Minimize impact on air quality, which resulted from the release of exhaust emissions from vehicles	(1)	All delivery tankers should be adequately maintained to reduce exhaust emissions	Visual inspection
	Minimize impact on air quality, which resulted from the dust	(1)	Use of water suppression – watering to control loose material on paved or unpaved road surfaces	Visual inspection
Soil and Water Quality (surface water and groundwater)	Minimize impact to soil, surface water and/or groundwater that may occur as a result of leaks and spills	(1)	Installing impermeable structures (e.g., concrete vaults) under and around underground storage tanks	Fuel stock inventory
		(2)	Storage tanks installed must have appropriate coating as means of corrosion protection	Emergency response plan
		(3)	Any significant spills and leaks incidents must be reported to relevant authorities	Incident reporting
		(4)	Overfill and spills during tanker unloading should be prevented	
		(5)	A closed coupling shall be used when fuel is being transferred from the tanker into the underground storage tanks	
		(6)	A competent person must remain near the tanker during unloading	
		(7)	Notice/warning signs are posted when fuels are being	

			discharged into storage tanks	
		(8)	An impermeable surface ground (cemented) at the area dedicated to unloading fuel from tankers into the storage tanks and refueling area, and allow drainage into the water treatment system	
		(9)	The oil/water separator is checked and tested to ensure that it is working properly	
		(10)	The accumulated contents in the oil/water separator must be removed and disposed into appropriate treatment system (absorb into sand dedicated for this purpose)	
		(11)	Accidental leakages and spills that may occur on the forecourt must be cleaned immediately using dry sand provided in a removable containers for each of fuel dispenser, which then must be properly disposed	
		(12)	For the purpose of detecting leak, the quantities of fuel delivered, stored and dispensed stock are monitored and recorded on daily basis, and records are kept on site	
		(13)	Regular inspection of all the pumps and dispensers for leaks	
		(14)	Emergency response plan must be in place for the site, which clearly describes the procedures and include emergency contact numbers	
		(15)	If contamination or leakage is detected, the emergency procedures must be followed	
		(16)	All pump attendants must undergo appropriate training, which include training to prevent spillages during dispensing and responded quickly in any emergency situation that may arise	
		(17)	**Double layer pipe** to prevent oil spills, leaking pipes and explosion (future rehabilitation plan)	
		(18)	Adequate entry of fuel tankers to the area for unloading and allow exit from the fuel filling station into a safe area by moving forward without the need of any maneuvers	
		(19)	Provide appropriate drainage systems to manage surface	

			runoff.	
		(20)	Landscaping: Re-surface open areas on completion	
		(21)	All staffs should ensure that dispensers hoses are not laid down on the pump island floor at any time	
		(22)	Use amonitoring well to monitor the leakage in the underground tank	
Health, Safety and the Environment (HSE)	Minimize occupational risk to employees, health and safety risks to the customers and the surrounding community	(1)	All pump attendants must attend training on first aid course and safety course.	Training certificates
		(2)	All staffs shall be provided with adequate uniform and personal protective equipment	
		(3)	Posted notices and signs regarding the safety measures of the fuel filling station on the area that can be easily seen by the staffs and customers	Safety and protection zone
		(4)	The fuel filling station is equipped with firefighting equipment such as fire extinguishers that are regularly maintained and have a fire contingency plan which are made aware to all the employees	
		(5)	Pump attendants can only begin refilling the vehicle's fuel tank after the engines and ignition sources have been fully cut off	
		(6)	Ignition source (e.g. smoking) and electronic components are prohibited within the fuel filling station's safety zone	
		(7)	During the bulk fuel delivery, a competent person must be present, and buckets of sand and fire extinguishers are made easily accessible	
		(8)	During operation of unloading/ refueling from tanker to the storage tanks, the tanker must parked at the properly marked area and all circulation of people and other vehicles within the area is strictly prohibited and must be prevented	
		(9)	Training routine for first aid and firefighting(follow the validity period of the certificate)	
		(10)	Rotating workers/staff to prevent inhaling gasoline vapor for long time.	

		(11)	All dispenser attendance must attend training on first Aid Training, Safety Training and firefighting training.	
		(12)	All Staffs are required to use PPE (Personal Protective Equipment) and uniform during attendance costumer	
		(13)	Staff should ensure dispenser's hoses are not laid on the pump island's floor at any time	
	To prevent fire and explosions in the facility during unloading of fuel from tanker into storage tanks	(1)	Adequate entry of fuel tankers to the area for unloading and allow exit from the fuel filling station into a safe area by moving forward without the need of any maneuvers	Visual assessment
		(2)	Staff Should control the traffic during the peak hours in the facility	
		(3)	Unloading of fuel to storage tank particularly gasoline is recommended to be undertaken during early morning/noon to minimize the generation of vapor from tanks and tankers that can trigger fires/explosion in the facility	
		(4)	All the vehicle engines should be switch of during the unloading of the fuels from the tankers into storage tank	
		(5)	Entry vehicle should be stopped and engines should be switch off right away during the unloading of fuel from tanker to storage tank	
		(6)	No smoking and mobile sign should be displayed all the time	
		(7)	All activities that cause ignition have to be ceased during the unloading of the fuel in to tanks	Safety and protection zone
		(8)	Fire extinguisher should be made available at all times at the facility during the unloading fuels from tankers into storage tank	
		(9)	Only trained and competent staffs should be assigned to handle/use fire extinguisher in the event of emergency	
Traffic associated with vehicle movement on site	Reduce any possible traffic congestion and vehicular impact	(1)	The entry and exit of vehicles into and from the fuel filling station are made through one-way accesses	Surveillance by the staffs
		(2)	Parking of vehicles in fuel filling station pathway is not permitted	
		(3)	Adequate entry of fuel tankers to the area for unloading and	

			allow exit from the fuel filling station into a safe area by moving forward without the need of any maneuvers	
Noise	Reduce the noise impact	(1) (2) (3) (4) (5)	Noise should be kept at minimum especially at night time Avoid loud background music that are clearly audible away from the forecourt Avoid receiving fuels or other deliveries at night Developing a mechanism to record and respond to complaints Appropriate operation schedule in GSGP Petrol Station is Open 7:00 Am – 19:00 Pm	At discretion of all the staffs
Social Impact	Minimize negative impact during Operation period	(1) (2) (3) (4)	Prioritize hiring worker from nearest surrounding community, Adequate signs and site security Suitable staff training for providing a good services to costumer Immediate contact the emergency number if something unexpected happens	

Maintenance Phase

Activity/aspect	Objective	No.	Mitigation measures Commitment/action/control	Parameters for monitoring
Potential impact during the maintenance of components	Prevent damage to components, Minimize occupational risk to employees and Minimize impact on Environment	(1)	**Storage Tanks** • Look for stains on steel where leak may be occurring • Check foundation for wash-out/deterioration • Open up the tank a minimum of every two years and conduct own visual inspection inside • Check for weld deterioration and corrosion • If tank is coated, visually check coating for blisters or cracks • If tank has an internal containment liner, check leak monitor weekly • carry out maintenance according to the specifications of the storage tank (storage tank maintenance every 5-10 years depend on storage tanks specifications) • Keep a record of inspections and results • Install class 2 leak detection system to detect the leakage • Fuel delivery should be stopped • Delivery fuel to vehicle should be stopped • Proper PPE should be used when carry out the maintenance	Visual inspection

			• Establish daily or weekly monitoring program on water level on fuel storage tanks based on the industry bast practices and proper record shall be kept on site and made available to ANPMwhen require this.	
		(2)	**Fuel Pipes maintenance** • Check associated piping • Look for stains on steel where leak may be occurring • Use specific fuel pipes • carry out maintenance according to the specifications of the storage tank (Fuel Pipes maintenance every 5-10 years depend on fuel pipes specifications) • Keep a record of inspections and results	Visual inspection
		(3)	**Fuel Dispensers** • Use standard dispenser • Calibration dispensers every 3 months • ensure that the electric power is sufficient to operate that dispensers • Keep a record of inspections and results • Staff should ensure dispenser's hoses are not laid on the pump island's floor at any time • Always check the pipe joints at the dispenser and storage tank • During the maintenance activity, fuel delivery to storage tank should be stopped • During the maintenance activity, delivery of fuel of vehivcles' tank should be stopped • Proper PPE should be used when carry out the maintenance	Visual inspection
		(4)	**Maintenance of Canopy, Fences, pavements and all infrastructure to be constructed within the facility** • Renovation of buildings if needed • Immediately replace the leaking canopy • Check electrical installation to prevent short-circuit • Repaint the wall, fence, safety sign etc. that have faded • Ensure all activity should be stopped when canopy is under maintenance • Ensure the barricade is used to prevent people entering the pump island • Barricade should be used around pavement maintenance site's; the same to wall and fence • Proper PPE should be used when carry out maintenance • Signage should display when carry out any maintenance	Visual inspection

			in the facility	

Decommissioning Phase

Activity/aspect	Objective	No.	Mitigation measures Commitment/action/control	Parameters for monitoring
Traffic associated with removal of underground fuel storage tanks and operating machinery	Manage any potential traffic congestion and reduce possible vehicular impact	(1) (2) (3)	Coordination of movement of vehicles on site and off site to reduce risk of traffic congestion and/or potential vehicular impacts Installation of signage near the facility to inform general traffic. Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement	Surveillance provided by workers on site, e.g. the decommissioning contractor Incident report
Safe handling of underground fuel storage tanks	Minimize risk of spillage during tanks removal	(1) (2) (3)	Removing the fuel product from the underground fuel storage tanks Disconnect pipes and vents prior to lifting and removal of underground storage tanks Properly secured the underground storage tanks upon transporting them from the site	Visual assessment
Noise	Minimize potential noise impact	(1) (2) (3) (4)	Decommissioning activities will be carried out during business hours only (i.e. 8am – 5pm) Informing the neighboring community regarding the decommissioning activity and the expected duration Excessive noise should be limited whenever possible Using earplug and other appropriate personal protective equipment	Incident report
Soil and water quality	Reduce the potential of soil contamination, surface and groundwater contamination during and after decommissioning	(1) (2)	The residual product from the underground storage tank will be removed and its associated infrastructure Ensure that the backfill material used is not impacted (non-impacted soil)	Visual assessment on site and incident report

		(3)	Flush clean water to the piping system and clean the tank prior to decommissioning	
		(4)	Ensure that any contaminated soil is removed and properly disposed If any soil or water pollution is detected, relevant authorities should be informed	
Air Quality and Dust control	Limit dust emissions	(1)	Employ appropriate measures to reduce the dust generation by wetting the affected surface ground and covering stockpiles	Visible dust emission
		(2)	Using proper PPE	
		(3)	Spraying of water in the working area	
Health, Safety and the Environment (HSE)	Minimize occupational risk to employees, health and safety risks to the customers and the surrounding community	(1)	Minimize exposure to hazard through workers rotation and limitation to working hours (max. 8 hrs)	Training certificates
		(2)	Provision of training for proper equipment handling and safety precautions for equipment handling	Safety and protection zone
		(3)	Adequate supervision for handling of heavy machinery	
		(4)	Adjustment of work and rest period for workers when days are especially hot	
Waste generation	Minimize the solid and liquid waste generated	(1)	Any solid or liquid waste must be properly managed and disposed at the designated area/landfill	Visual inspection
Visual impact	Minimizing the visual impact from the surrounding receptors	(1)	Fencing the decommissioning area	Visual inspection
		(2)	At the end of project uninstall and demolish the unneeded structures	
Social Impact	Minimize negative, impact during decommissioning phase	(1)	Consultation with Relevant Authorities, Local Authorities, community and worker regarding the plan	
		(2)	Adequate signs and site security	
		(3)	Immediate contact the emergency number if something unexpected happens	

10. SUMMARY OF ENVIRONMENTAL MANAGEMENT PLAN

The Environmental Management Plan (EMP) involves risk management strategies that should be undertaken by the project proponent, project manager and the residents to mitigate environmental degeneration. They are approaches to monitor, control, reclaim and restore the environment back to its appropriate state. EMP's for projects thus provide logical frameworks within which the identified issues of environmental concern can be mitigated, monitored and evaluated.

Environmental monitoring involves measurement of relevant parameters, at a level of details accurate enough, to distinguish the anticipated changes. Monitoring aims at determining the effectiveness of actions to improve environmental quality.

The environmental management and monitoring plans has been developed and outlined to bring home the key findings of the Environmental Impact Assessment of the project in mention, recommending necessary mitigation actions, defining roles and the estimated cost.

a. Institution roles and Responsibilities

The following institutions and authorities (as mentioned earlier in the section of institutional roles and responsibilities) have roles and responsibilities in safeguarding the social wellbeing, economic, and the environmental protection relevant to the proposed project.

(1) *Agençia Nacional de Licensiamento Ambiental (ANLA)* (2) *Secretario Estado do Meio Ambiente (SEA)*	Carry out inspection and monitoring to safeguard the environment, health and safety
(3) Autoridade Nacional do Petróleo Minerais (ANPM) *Direcção Downstream* (4) *Ministério* do Petróleo	eThe regulatory authority for the petroleum and natural gas and related products, and mining industries Carry out inspection and monitoring on downstream activities
(5) *Direcção Nacional* de *Servicos* de *Águas e Saneamento (DNSAS)*	Responsible for the national management of water resources. It also formulates sector policy, manages the distribution for human consumption, and monitor water quality through DNSAS laboratory
(6) *Ministério da Saúde*	Responsible for public health
(7) Direcção Nacional da Protecção Civil (which include the fire fighters)	Responsible for fire hazard and emergency

b. Cost Estimation for Mitigation Measures

The total investment of Carrier Fuel Unip Lda is equal to $300,000 which will covered construction of the Fuel Station and its supporting facilities, training of staff, component of fuel station facilities.

Table 7. Summary of key Environmental Impact, Mitigation Measures and Responsibility

Pre-Construction

Activities	Impacts	Parameter/particular concerns	Preventive action	Control and responding action	Corrective action
• Land clearing	**Air quality**	*Dust (particulate Matter)*	• Water sprinkling in the working area at least 3 - 4 times a day • Ensuring that all vehicles transporting potentially dust-producing material are not overloaded, are provided with adequate tail-boards and side-boards, and are adequately covered with a tarpaulin (covering the entire load and secured at the front, sides and tail of the vehicle) during transportation • Staffs and workers should equipped with appropriate PPE	• Suspend or stop the activity • Carry out dust (particular matter) survey and comply with national and international threshold for exposure level • Staffs and workers should equipped with dust masker	• Trees that are not within the working areas will not be cut unless for justifiable engineering or safety reasons. Some big tress will be retain for shading area. • Regular inspection to the working area to ensure the condition of the working area • Carry out health surveillance to worker
• Use of heavy or machine for land clearing and excavation • Vehicles movements and excavation • Trash burning		*Flue gasses/exhaust gasses*	• Prohibition of the use of equipment and machinery that causes excessive pollution (i.e. visible smoke) at the working area. • Construction equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order. • Waste materials shall not be burned on working area. • Staffs and workers should equipped with appropriate PPE	• Suspend or stop the activity • Proper piling of spoil from earth work • Segregation of wastes shall be observed. Cleared foliage, shrubs and grasses may be given to local farmers for fodder and fuel. Organic (biodegradables) shall be collected and disposed of on-site by composting or sold to recyclers. • Solid and liquid wastes stored in drums awaiting disposal in designated area.	• Conduct a regular check to the equipment before utilizing it to work • Residual general wastes been disposed of in disposal sites approved by local authorities • Change or substitute the vehicle that causes excessive pollution to a well-maintained equipment • Carry out health surveillance to worker
• Land clearing • Vehicles movement and excavation	**Workers Occupational health and Safety (OHS)**	*Dust (particulate matter)*	• Water sprinkling in the working area at least 3 - 4 times a day • Staffs and workers should equipped with appropriate PPE • Regular inspection to the working area to ensure the condition of the working area	• Suspend or stop the activity • Carry out dust (particular matter) survey and comply with national and international threshold for exposure level • Administer first aid to those who are injured and contact emergency services if further assistance is needed.	• Trees that are not within the working areas will not be cut unless for justifiable engineering or safety reasons. Some big tress will be retain for shading area. • Carry out health surveillance to worker
• Use of heavy or machine for land clearing and excavation • Vehicles movements and excavation • Trash burning		*Flue gasses/exhaust gasses*	• Prohibition of the use of equipment and machinery that causes excessive pollution (i.e. visible smoke) at the working area. • Construction equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order. • Waste materials shall not be burned on working area.	• Suspend or stop the activity • Proper piling of spoil from earth work • Segregation of wastes shall be observed. Cleared foliage, shrubs and grasses may be given to local farmers for fodder and fuel. Organic (biodegradables) shall be collected and disposed of on-site by composting or sold to recyclers. • Solid and liquid wastes stored in	• Conduct a regular check to the equipment before utilizing it to work • Residual general wastes been disposed of in disposal sites approved by local authorities • Change or substitute the vehicle that causes excessive pollution to a well-maintained equipment

Activities	Impacts	Parameter/particular concerns	Preventive action	Control and responding action	Corrective action
			• Staffs and workers should equipped with appropriate PPE	drums awaiting disposal in designated area. • Administer first aid to those who are injured and contact emergency services if further assistance is needed.	
• Land clearing and excavation		*Expose to heat*	• Wearing clothes that allow sweat to evaporate • Regular drinking to maintain an adequate hydration level • Ensuring a good quality rest period prior to attending work; • Minimize exposure to hazard through workers rotation and limitation to working hours (max 8 hours) • Staffs and workers should equipped with appropriate PPE	• Suspend or stop the activity • Administer first aid to those who are injured and contact emergency services if further assistance is needed.	• Provide an adequate rest area • Carry out health surveillance to worker • First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident
• Land clearing • Vehicles movements during land clearing and excavation		*Risk injury related to accident (vehicles, heavy duty equipment, etc.)*	• The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Human traffic to be directed away from the construction works site using appropriate signage. • Build fence to prevent unauthorized people entering to the work site • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Proponent should properly resource a qualified/ experienced person • Signs and other appropriate safety features and traffic control devices used to indicate construction works are being undertaken. • Construction worker should wear proper PPE to do the task	• Suspend or stop the activity • The working area is kept free of debris, spoil, and any other material at all times and watered to suppress the dust. • Administer first aid to those who are injured and contact emergency services if further assistance is needed.	• First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • Conduct a regular check to the equipment • Plan schedule maintenance for period or within the year • Provision of training for proper equipment handling and safety precautions for equipment handling • Emergency Response Plan (as part of EMP) shall be prepared by project proponent to cover accidents and evacuation
• Use of heavy machine during land clearing and excavation		*Mechanical related works*	• The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Human traffic to be directed away from the construction works site using appropriate signage. • Build fence to prevent unauthorized people entering to the work site • Appointing designated personnel to help smoothing traffic out during an	• Suspend or stop the activity • The working area is kept free of debris, spoil, and any other material at all times and watered to suppress the dust. • Administer first aid to those who are injured and contact emergency services if further assistance is needed.	• First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • Conduct a regular check to the equipment • Plan schedule maintenance for period or within the year • Provision of training for proper equipment handling and safety precautions for

Activities	Impacts	Parameter/particular concerns	Preventive action	Control and responding action	Corrective action
			especially heavy vehicle movement • Proponent should properly resource a qualified/ experienced person • Signs and other appropriate safety features and traffic control devices used to indicate construction works are being undertaken • Construction worker should wear proper PPE to do the task		equipment handling • Emergency Response Plan (as part of EMP) shall be prepared by project proponent to cover accidents and evacuation
• Land clearing • Vehicles movements during land clearing and excavation	**Social impact (community health and safety)**	*Dust (particulate matter)*	• Water sprinkling in the working area at least 3 - 4 times a day • Ensuring that all vehicles transporting potentially dust-producing material are not overloaded, are provided with adequate tail-boards and side-boards, and are adequately covered with a tarpaulin (covering the entire load and secured at the front, sides and tail of the vehicle) during transportation • Inform affected communities well in advance for the nuisance.	• Suspend or stop the activity • Carry out dust (particular matter) survey and comply with national and international threshold for exposure level • Staffs and workers should equipped with dust masker	• Trees that are not within the working areas will not be cut unless for justifiable engineering or safety reasons. Some big tress will be retain for shading area. • Regular inspection to the working area to ensure the condition of the working area
• Use of heavy or machine for land clearing and excavation • Vehicles movements • Trash burning		*Flue gasses/exhaust gasses*	• Prohibition of the use of equipment and machinery that causes excessive pollution (i.e. visible smoke) at the working area. • Construction equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order. • Waste materials shall not be burned on working area. • Staffs and workers should equipped with masker	• Suspend or stop the activity • Proper piling of spoil from earth work • Segregation of wastes shall be observed. Cleared foliage, shrubs and grasses may be given to local farmers for fodder and fuel. Organic (biodegradables) shall be collected and disposed of on-site by composting or sold to recyclers. • Solid and liquid wastes stored in drums awaiting disposal in designated area.	• Conduct a regular check to the equipment before utilizing it to work • Residual general wastes been disposed of in disposal sites approved by local authorities • Change or substitute the vehicle that causes excessive pollution to a well-maintained equipment • Carry out health surveillance to worker
• Vehicles movements of project area during site preparation		*Traffic accident*	• The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Human traffic to be directed away from the construction works site using appropriate signage. • Build fence to prevent unauthorized people entering to the work site • Remove unnecessary things from the site; set and clean up necessary things in order to provide safe working space and maintain the	• Suspend or stop the activity • Provision of adequate protection to the general public in the vicinity of the work site, including installing safety barriers if required by villagers and signage or marking of the work areas. • The working area and access road are kept free of debris, spoil, and any other material at all times and watered to suppress the dust. • Administer first aid to those who are injured and contact emergency services if further	• First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • Conduct a regular check to the equipment • Plan schedule maintenance for period or within the year • Frequently held training on traffic safety and follow up drivers driving attitude to respect the safety and follow the speed limit

Activities	Impacts	Parameter/particular concerns	Preventive action	Control and responding action	Corrective action
			clean condition as standard. • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Display the emergency contact list in the working area • Signs and other appropriate safety features and traffic control devices used to indicate construction works are being undertaken • Inform affected communities well in advance for the nuisance.	assistance is needed.	• Emergency Response Plan (as part of EMP) shall be prepared by project proponent to cover accidents and evacuation • First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident
• Vehicles movements in project area during site preparation • Land clearing and excavation		*Noise impact*	• Isolate noise source by enclosing with barriers upon discussion with the management • The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Operation of noise generating equipment should only be during the day • Workers are provided with ear defenders and noise abatement equipment as may be required. • Inform affected communities well in advance for the nuisance. • Operation of noise generating equipment should only be during the day • Inform affected communities well in advance for the nuisance.	• Suspend or stop the activity • Slowdown the vehicle speeds • Limit the work time from 8 Am to 8 PM with the break in between, night work is proceed with the local community disclosure	• Utilized equipment with one lower noise emission • Slowdown the vehicle speeds • Provision of training for proper equipment handling and safety precautions for equipment handling • Any complaints regarding noise will be dealt with by the Proponent in the first instance through the GRM.
• Leaking of oil and lubricants from the heavy machinery and vehicles	**Soil quality, Water quality (both groundwater and surface water)**	*Soil pollution*	• Operation of well-maintained motorized fleet where all equipment and vehicles are regularly checked for leakage of fuel and other potential operational hazard related to leakage of fuel • Provide appropriate drainage systems to manage surface runoff. • Landscaping: Re-surface open areas on completion	• Suspend or stop the activity • Any spill or accidental leakage of the substance has to be cleaned up promptly. Operator should have in place procedure, equipment as well as material suitable to clean up oil leaks either on the ground or in the surface water. Contaminated water or soil should be disposed-off at oil disposal site. • Ensure availability of spill clean-up materials (e.g., Absorbent pads, etc.) specifically designed for petroleum products and other hazardous substances	• Daily Check to the equipment to ensure the condition of the equipment • Change the broken equipment with the well maintained equipment • Regularly test the soil quality to ensure soil is not contaminated.
		Surface water	• Operation of well-maintained motorized fleet where all equipment and vehicles are regularly checked	• Suspend or stop the activity • Any spill or accidental leakage of the substance has to be cleaned up	• Daily Check to the equipment to ensure the condition of the equipment

Activities	Impacts	Parameter/particular concerns	Preventive action	Control and responding action	Corrective action
			for leakage of fuel and other potential operational hazard related to leakage of fuel • Provide appropriate drainage systems to manage surface runoff. • Landscaping: Re-surface open areas on completion	promptly. Operator should have in place procedure, equipment as well as material suitable to clean up oil leaks either on the ground or in the surface water. Contaminated water or soil should be disposed-off at oil disposal site. • Ensure availability of spill clean-up materials (e.g., Absorbent pads, etc.) specifically designed for petroleum products and other hazardous substances	• Change the broken equipment with the well maintained equipment • Regularly test the water quality to ensure water source is not contaminated.
		Groundwater	• Operation of well-maintained motorized fleet where all equipment and vehicles are regularly checked for leakage of fuel and other potential operational hazard related to leakage of fuel • Provide appropriate drainage systems to manage surface runoff. • Landscaping: Re-surface open areas on completion	• Suspend or stop the activity • Any spill or accidental leakage of the substance has to be cleaned up promptly. Operator should have in place procedure, equipment as well as material suitable to clean up oil leaks either on the ground or in the surface water. Contaminated water or soil should be disposed-off at oil disposal site. • Ensure availability of spill clean-up materials (e.g., Absorbent pads, etc.) specifically designed for petroleum products and other hazardous substances	• Daily Check to the equipment to ensure the condition of the equipment • Change the broken equipment with the well maintained equipment • Regularly test the soil quality to ensure water source is not contaminated.
• Vehicles movements in project area during site preparation	**Traffic impact**	*Traffic jam*	• Installation of signage near the facility to inform general traffic those construction vehicles might make an access in and out of the facility. • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Inform affected communities well in advance for the nuisance and Contact all relevant local authorities for utilities and local village groups • Provision of adequate protection to the general public in the vicinity of the work site, including installing safety barriers if required by villagers and signage or marking of the work areas.	• Suspend or stop the activity • The access road is kept free of debris, spoil, and any other material at all times • The entry and exit of vehicles into and from the working are made through one-way accesses • Parking of vehicles in working area pathway is not permitted	• Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Movements of the construction vehicles not in the rush hours • Conduct a traffic survey to identify the traffic within the project location
		Traffic accident	• The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Human traffic to be directed away from the construction works site using appropriate signage.	• Suspend or stop the activity • Provision of adequate protection to the general public in the vicinity of the work site, including installing safety barriers if required by villagers and signage or marking of the work areas. • The working area and access road	• First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • Conduct a regular check to the equipment • Plan schedule maintenance

Activities	Impacts	Parameter/particular concerns	Preventive action	Control and responding action	Corrective action
			• Build fence to prevent unauthorized people entering to the work site • Remove unnecessary things from the site; set and clean up necessary things in order to provide safe working space and maintain the clean condition as standard. • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Display the emergency contact list in the working area • Signs and other appropriate safety features and traffic control devices used to indicate construction works are being undertaken • Inform affected communities well in advance for the nuisance.	are kept free of debris, spoil, and any other material at all times and watered to suppress the dust. • Administer first aid to those who are injured and contact emergency services if further assistance is needed.	for period or within the year • Frequently held training on traffic safety and follow up drivers driving attitude to respect the safety and follow the speed limit • Emergency Response Plan (as part of EMP) shall be prepared by project proponent to cover accidents and evacuation • First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident
• Land clearing	**Ecology impact**	*Flora/vegetation*	• Marked the approved location • Works had been done restricted to the approved boundary. • The workers have been informed about general environmental protection and the need to avoid un-necessary felling of trees wherever possible. • Vegetation clearance during surveying and demarcation activities was minimized. Some trees in the project area had been saved. • Field survey had conducted before activities commence to identify all of affected vegetation	• Suspend or stop the activity • Trees that are not within the working areas were not cut. • Minimized used of heavy equipment by manual excavation • Backfill and compacting	• Onsite burning is prohibited. • Revegetation should be carried out in line with the decommissioning plan.
		Fauna/animals	• Marked the approved location • Works had been done restricted to the approved boundary. • Entry to the statutory protected areas, important bird areas and/or sensitive areas (rivers and forests) by workers will be banned;	• Suspend or stop the activity • Use of guns and hunting equipment by workers will be banned and dismiss workers taking or using green timber or hunting or in possession of wildlife;	• The workers have been informed about general environmental protection • Trees that are not within the working areas were not cut. • Onsite burning is prohibited. • Take immediate action to the worker that broke the local rules.
	Traffic impact	*Traffic accident*	• The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Human traffic to be directed away from the construction works site using appropriate signage. • Build fence to prevent unauthorized	• Suspend or stop the activity • Provision of adequate protection to the general public in the vicinity of the work site, including installing safety barriers if required by villagers and signage or marking of the work areas. • The working area and access road are kept free of debris, spoil, and	• First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • Conduct a regular check to the equipment • Plan schedule maintenance for period or within the year

Activities	Impacts	Parameter/particular concerns	Preventive action	Control and responding action	Corrective action
			people entering to the work site • Remove unnecessary things from the site; set and clean up necessary things in order to provide safe working space and maintain the clean condition as standard. • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Display the emergency contact list in the working area • Signs and other appropriate safety features and traffic control devices used to indicate construction works are being undertaken • Inform affected communities well in advance for the nuisance.	any other material at all times and watered to suppress the dust. • Administer first aid to those who are injured and contact emergency services if further assistance is needed.	• Frequently held training on traffic safety and follow up drivers driving attitude to respect the safety and follow the speed limit • Emergency Response Plan (as part of EMP) shall be prepared by project proponent to cover accidents and evacuation • First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident
	Economic impact	*Land status and job opportunity*	• Local authority, affected community and land claimants consulted in advance before commence the work. • Consultation with local authority and community regarding the project activity and it's impacts and benefits in advance. • Prioritize hiring worker from nearest surrounding community	• Conduct surveys before activities commence to identify all members of affected people, fairly compensate the affected properties • Keep communicating the land owner and local authority for the local worker • Hired and trained local workers from the nearby sucos.	• The agreed location to be used for the project established in coordination with the land owner and local authority • Assigned one member of their staff to be the liaison between the Suco chiefs and elders and Proponent
• Land excavation	**Geological impact**	*Soil Erosion*	• Field survey had conducted before activities commence to identify the geological information • Runoff control such as line ditches, sedimentation ponds and silt fences shall to be installed on the runoff flow drainage. • Prevent accidental access and avoid drowning when excavation area become water-filled by implementing measures such as fencing, backfill as soon as practicable • Provide adequate drainage to avoid accumulation of stagnant water during the excavation	• Refill excavation area using inert surplus spoil material and plant vegetation. • Minimized used of heavy equipment by manual excavation • Ensure working areas are left in a tidy state with stable side slopes and proper drainage in order to avoid creation of water bodies favourable for mosquito breeding. • Spoil and overburden will not be disposed of on fragile slopes, flood ways, wetland, farmland, forest, religious place or other culturally sensitive area e.g. where livelihood is derived	• Assigned one member to control the excavation activity • Re-vegetation with local fast growing species, or other plants in consultation with the land owners and suco chiefs, will be carried out incrementally and as quickly as possible after extracting work done in some areas.
	Traffic impact	*Traffic Accident*	• The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Human traffic to be directed away from the construction works site	• Suspend or stop the activity • Provision of adequate protection to the general public in the vicinity of the work site, including installing safety barriers if required by villagers and signage or marking of the work areas.	• First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • Conduct a regular check to the equipment

Activities	Impacts	Parameter/particular concerns	Preventive action	Control and responding action	Corrective action
			using appropriate signage. • Build fence to prevent unauthorized people entering to the work site • Remove unnecessary things from the site; set and clean up necessary things in order to provide safe working space and maintain the clean condition as standard. • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Display the emergency contact list in the working area • Signs and other appropriate safety features and traffic control devices used to indicate construction works are being undertaken • Inform affected communities well in advance for the nuisance.	• The working area and access road are kept free of debris, spoil, and any other material at all times and watered to suppress the dust. • Administer first aid to those who are injured and contact emergency services if further assistance is needed.	• Plan schedule maintenance for period or within the year • Frequently held training on traffic safety and follow up drivers driving attitude to respect the safety and follow the speed limit • Emergency Response Plan (as part of EMP) shall be prepared by project proponent to cover accidents and evacuation • First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident
	Economic impact	*Land status and job opportunity*	• Local authority, affected community and land claimants consulted in advance before commence the work. • Consultation with local authority and community regarding the project activity and it's impacts and benefits in advance. • Prioritize hiring worker from nearest surrounding community	• Conduct surveys before activities commence to identify all members of affected people, fairly compensate the affected properties • Keep communicating the land owner and local authority for the local worker • Hired and trained local workers from the nearby sucos.	• The agreed location to be used for the project established in coordination with the land owner and local authority • Assigned one member of their staff to be the liaison between the Suco chiefs and elders and Proponent

CONSTRUCTION PHASE

Activities	Impacts	Parameter/ particular concerns	Preventive action	Control and responding action	Corrective action
• Vehicles movements in and out of the facility • Concrete mixture • Use of heavy machineries • Use of backup generator • Wastes production and burning	**Air quality**	*Dust (particulate matter) and Flue gasses/exhaust gasses from activity impact on air quality*	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Proper pilling of soil from earth work • Build fence around the project site to isolate dust to spread to surround • Installation of signage inside and outside the facility to inform general traffic those construction vehicles might make an access in and out of the facility. • Suspend or Stop the work when it is windy if required to • Daily Check and maintenance to the equipment before be utilized to avoid emission to the air • Reduce vehicle's speed to minimise flue gasses emission and dust from suspend in the air • Turn off unnecessary idling of vehicles and machineries' engines • Waste materials shall not be burned on working area and disposed to the designated area. • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce the vehicle speed to minimize flue gasses emission and dust from suspend in the air • Suspend or Stop the work when it is windy • Construction equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order. • Clean the wastes and disposed at the designated location • Appointing designated personnel to supervise the activity	• Re-planting trees after construction at the suitable and designated location • Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Conduct maintenance to vehicles regularly • Regular inform the drivers to operate vehicles according to established speed • Regular inform workers to manage and dispose the wastes of at the designated location • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity
• Vehicles movements in and out of the facility • Use of concrete mixer • Use of heavy machinery • Use of backup generator Wastes production and burning		*Dust (particulate matter) and Flue gasses/ exhaust gasses impact on workers*	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Proper pilling of soil from earth work • Installation of signage inside and outside the facility to inform general traffic those construction vehicles might make an access in and out of the facility. • Suspend or Stop the work when it is windy • Proper PPE should be worn by the Workers • Daily Check and maintenance to the equipment before be utilized to avoid emission to the air	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce the vehicle speed to minimize flue gasses emission and dust from suspend in the air • Suspend or Stop the work when it is windy • Construction equipment has been maintained to a good standard. The	• Proper PPE should be worn by the Workers • Re-planting trees after construction at the suitable and designated location • Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Conduct maintenance to vehicles regularly • Regular inform the

			• Reduce vehicle's speed to minimise flue gasses emission and dust from suspend in the air • Workers should spend less time next to idling engines • Turn off unnecessary idling of vehicles and machineries' engines • Wastes should not be burnt in the project area, but managed properly and disposed of at designated location • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity	equipment has been checked at regular intervals to ensure they are maintained in working order. • Clean the wastes and disposed at the designated location • Appointing designated personnel to supervise the activity	drivers to operate vehicles according to established speed • Regular inform workers to manage and dispose the wastes of at the designated location • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity
• Construction and installation of facility's components		*Electrical related work accident or incident*	• Only trained and competent people install the electrical system • The worker should wear proper PPE to do the task Install specific cable only for the electrical system • Check electrical installation in the equipment to prevent short-circuit before operation. • Establishment of safety measures and use safe work practices every time electrical equipment is used. • All Workers should informed and aware the location and how to operate shut-off switches and/or circuit breaker panels • Minimize the potential for water or chemical spills on or near electrical equipment. • Only suitable electrical equipment provided are used • Maximum supervision from the project manager on the activity	• Suspend or stop the activity temporarily when there is accident on incident related to electricity • Only trained and competent people install the electrical system • Treat the minor injured Workers immediately • Evacuate the injured Workers to nearest hospital or clinic or contact emergency number for evacuation immediately • Maximum supervision from the project manager on the activity	• First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • The worker should be recovered completely before continue to work • Fair compensation the Workers if necessary • Maximum supervision from the project manager on the activity
		Expose to heat extreme heat	• Workers must adjust exposure until body is acclimated to the heat • Minimize exposure to hazard through workers rotation and limitation to working hours • Regular drinking to maintain an adequate hydration level • Ensuring a good quality rest period prior	• Wearing clothes that allow sweat to evaporate • Immediate treat workers suffer from unserious heat stress • Immediate Evacuate the workers from serious heat stress to hospital or clinic	• Proponent must provide proper PPE to all Workers • The worker should be recovered completely before continue to work • Fair Compensation the workers if necessary • Provide and display the

			to attending work Workers must wear proper PPE • Provide an adequate rest area • Provide and display the emergency contact list in the working area	• Appointing designated personnel to supervise the activity	emergency contact list in the working area • Appointing designated personnel to supervise the activity
		Accident or incident related to installation of components (underground storage, canopy, pump island, pipework, wall/fence, office etc.)	• Project manager should ensures that all Workers are fit prior to undertake the work • Only trained and competent staffs should be assigned to do the task • Project manager should ensure that all contractors, consultants and labourers must wear necessary personal protective equipment (PPE) on site. • Build fence around the project to prevent unauthorized people entering to the work site must be strictly controlled. • Open excavations must be clearly marked. • Appropriate health and safety signage must be displayed on site. • Construction Workers should wear proper PPE to do the tasks • All visitors must report to the site office. • Sign for the hazardous zones should be displayed on site and barricade hazardous zones • Maximum supervision from the project manager on the activity	• Suspend or stop the work temporary when there is serious accident or incident • Apply first aid to treat the unserious injured Workers • Evacuate serious injured Workers to nearest hospital or clinic or contact emergency number for evacuation immediately • Maximum supervision from the project manager on the activity	• Provide PPE for all Workers • Undertake training to specific job • First Aid kits must be made available at work place • Let the injured Workers recover completely before resume to work • Compensation the Workers if necessary • Maximum supervision from the project manager on the activity
		Accident or incident related to work in Confined space	• Ensure that only certified Workers can perform confined space work • Only trained and competent staffs should be assigned to do the task • Appointing designated personnel to supervise the activity • Use Respiratory protective equipment during perform confined space work • Make sure work to in a team of two or more • Maximum supervision from the project manager on the activity	• Suspend or stop the temporarily when accident or incident happen • Immediate Rescue the injured Workers from the confined space • Apply first aid to treat non serious injury • Evacuate the serious injured Workers to nearest hospital or clinic or call ambulance immediately • Maximum supervision from the project manager on the activity	• Provide proper PPE • Limit access to the confined space work • Let the work recover completely before resume to work • Fair Compensation the Workers if necessary • Maximum supervision from the project manager on the activity

• Vehicles movements in and out of the facility • Working with heavy machineries • Work at height		*Risk injury related to accident (vehicles, heavy duty equipment working in height, etc.)*	• Only trained and competent staffs should be assigned to do the task • Install proper traffic sign in the facility and outside the facility • Provide safety training for Workers • Hold frequent safety meeting • Proper PPE should be worn a before conducting a task • Activities should be executed follow the safe system of work. • Organizing work to reduce exposure to the hazard. • Preventing access to the hazardous zones. • Workers must make sure that every time Workers are on roofs and scaffolding, fall-prevention countermeasures are in place. • Prevent falling objects • Recognize hazard and provide plan • Maximum supervision from project manager on the activity	• Suspend or stop the work temporarily when there is serious accident or incident • Immediate Rescue the injured work • Apply first aid to treat unserious injury • Evacuate serious injured Workers to nearest hospital or clinic or contact ambulance for evacuation assistance immediately • Maximum supervision from the project manager on the activity	• Provide proper PPE • First Aid kits must be made available at work place • Let the injured Workers recover completely before resume to work • Fair compensation the Workers if necessary • Maximum supervision from project manager on the activity
• Welding • Installation of facility components • Maintenance of cars and heavy machineries		*Workers Mechanical related works accident or incident*	• Proponent should properly hiring a qualified/ experienced and healthy person Proper PPE must be worn before starting work • Workers must understand mechanical hazard • Prevent body to contacting hazardous moving parts • Ensure no objects can fall into moving parts • Maximum supervision from project manager on the activity	• Suspend or stop the work temporarily when there is serious accident or incident • Immediate Rescue the injured work • Apply first aid to treat unserious injury • Evacuate serious injured Workers to nearest hospital or clinic or contact ambulance for evacuation assistance immediately • Maximum supervision from the project manager on the activity	• Provide proper PPE • First Aid kits must be made available at work place • Let the injured Workers recover completely before resume to work • Fair compensation the Workers if necessary • Maximum supervision from project manager on the activity
• Welding • Installation of electricity • Leaking of fuels from vehicles and		*Impact of fire or/and explosion in site project on Workers*	• Eliminate activities that cause fire explosion during construction • Investigate surroundings before welding begins • Keep flammable materials far from welding areas	• Suspend or stop the work temporarily when there is serious accident or incident • If the fire is out of control, call the Fire department for	• Provide appropriate PPE • First Aid kits must be made available at work place • Ensure emergency procedures are well

heavy machineries			• Practice good housekeeping • Any leakage from vehicle or heavy machinery should be cleaned • Only allow experienced Workers install the electrical system • Take immediate action to Suspend or Stop the leakage from vehicles and machineries • Emergency procedure must be applied • Provide emergency contact number in the facility and make the Workers aware of it • Routine inspections of escape routes & fire safety signage • Always keep a fire extinguisher nearby • All worker should wear proper PPE • Maximum supervision from the project manager on the activity	assistance immediately • Evacuate Workers in the project site • Treat the unserious injured Workers immediately • Evacuate the serious injured Workers to nearest hospital or clinic, contact emergency number for evacuation • Maximum supervision from the project manager on the accident or incident	understood by Workers • Investigate what causes the fire or explosion • Let the workers recover completely before resume to work • Fair compensation the Workers if necessary • Maximum supervision from the project manager on the activity
• Vehicles movement in and out of the project area • Movement and use of heavy machinery • Excavation		*Noise and vibration impact on workers*	• Proper PPE should be worn a before conducting a task • Utilized equipment with one lower vibration and noise emission to ensure that the permissible occupation noise-rating limit of 85 dBA is not exceeded. • Ensuring a good quality rest period prior to attending work • All equipment to be adequately maintained and kept in good working order to reduce noise. • All noise generating maintained to ensure that they operate within the noise limits they were designed to operate • Watch for the loosen and falling structures • Maximum supervision from the project manager on the activity	• Proper PPE should be worn a before conducting a task • Utilized equipment with one lower vibration and noise • Suspend or stop the operation when there is accident or incident • Immediate treat minor injured workers • Evacuate serious injured Workers to nearest hospital or contact ambulance for assistance immediately • Maximum supervision from the project manager on the activity	• Proper PPE should be worn a before conducting a task • Utilized equipment with one lower vibration and noise emission • Maximum supervision from the project manager on the activity • Let the Workers recovery completely before resume to work • Maximum supervision from the project manager on the activity
• Vehicles movements in and out of the facility • Use of concrete mixer • Working with heavy	**Social impact (community's health and safety)**	*Dust (particulate matter) and Flue gasses /exhaust gasses impact on community*	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Proper pilling of soil from earth work • Build fence around the project site to isolate dust to spread to surround • Installation of signage inside and outside the facility to inform general traffic those construction vehicles might make an	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce vehicle speed to minimize flue gasses emission and dust from suspend in the air	• Re planting trees after construction at the designated location within the facility • Regular Water sprinkle in the dusty area to suppress dust from suspend in the air

machineries • Use of backup generator • Wastes production and burning			access in and out of the facility. • Suspend or Stop the work when it is windy if required to • Provide a proper PPE to the community that live around the project site • Daily Check and maintenance to the equipment before be utilized to avoid emission to the air • Reduce vehicle's speed to minimise flue gasses emission and dust from suspend in the air • Turn off unnecessary idling of vehicles and machineries' engines • Waste materials shall not be burned on working area and disposed to the designated area. • Adequate wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity	• Suspend or Stop the work when it is windy • Suspend or stop to work temporarily when receive any complaint from the community • Resolve the complaint in a proper manner before resume to work • Contact the police if physical confrontation involved during the complaint • Construction equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Clean the wastes and dispose of at the designated location • Appointing designated personnel to supervise the activity	• Prepare and archive the report on complaints • Prepare and provide PPE to community live around the project site • Conduct maintenance to equipment and vehicles regularly • Regular Inform the drivers to operate vehicles according to established speed • Regular Inform workers manage and dispose the wastes of at the designated location • Proper wastes management sign must be displayed at project site • Appointing designated personnel to supervise the activity
• Vehicles movements in and out of the facility • Movement of people outside the facility		*Traffic Jam and traffic accident (general traffic)*	• Organize the movement of vehicles on and off site to minimize risks and prevent congestion on roads in the vicinity of the site. • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Large vehicle movement must be taken place in appropriate location where it does not cause traffic jam • In cases where activities may obstruct traffic, local traffic officials/police officer must be contacted. • Proponent should properly hiring a qualified/ experienced and healthy person • Installation of signage near the facility to	• Reduce number of construction vehicle leaving project site during peak hours • Appointing designated personnel to help smoothing traffic out during an especially heavy vehicle movement • Frequently held training and inform on traffic safety and follow up drivers driving attitude to respect the safety and follow the speed limit • Driver should inform the	• Proper management plan for vehicle movement • Assign staffs to smoothen the traffic outside the facility • Reduce number of construction vehicle leaving the site during peak hours • Driver must aware of Emergency contact numbers in the car must be made available at project site • Fair compensation the victims of vehicle

			inform general traffic those construction vehicles might make an access in and out of the facility. • Reduce number of construction vehicle leaving the site during peak hours • Clear markings to set apart vehicle and pedestrians routes right outside the project site • Provide designated safe zones for drivers to stand when unloading/loading activity is being undertaken. • Frequently held training and inform on traffic safety and follow up drivers driving attitude to respect the safety and follow the speed limit. • Ensure that drivers are competent to operate the vehicles safely. • Manage the work hours and duration for drivers to minimize fatigue. • Implement a one-way system to reduce the need for vehicles to reverse on site. • Provision of adequate protection to the general public in the vicinity of the work site, including installing safety barriers if required by villagers and signage or marking of the work areas. • Establish a speed limit to the driver driving outside the project area. • Established parking area outside of the project area should not cause traffic jam • Provide emergency contact number in the vehicles and make drivers aware of it • Maximum supervision from the project manager on the activity	project manager or person in charge immediately when an accident or incident occur • Treat small injury immediately • Maximum supervision from project manager on the activity	accident if necessary • Maximum supervision from project manager on the activity
• Vehicles movements in and out of the facility • Working with heavy machineries • Construction of facility's		*Noise and vibration impact to community*	• Inform affected communities well in advance for the nuisance and Contact all relevant local authorities for utilities and local village groups • Operation of noise generating equipment should only be during the day. • Utilized equipment with one lower noise emission to ensure that the permissible occupation noise-rating limit of 85 dBA is	• Stop or suspend the work temporarily when there is complaint from the community • Resolve complaints from the community in a proper manner • Inform the relevant authorities if there is	• if possible use equipment with low noise • Maximum supervision from the project manager on the activity • Carry out the work in working hours • Use low noise and vibration equipment

components			not exceeded. • The equipment has been maintained to a good standard. The equipment has been checked at regular intervals to ensure they are maintained in working order • Isolate noise source by enclosing with barriers upon discussion with the management • Reduce heavy machinery and vehicles movements inside the facility, into or out of the facility • Use low noise and vibration equipment • Maximum supervision from the project manager on the activity	physical confrontation involved during the complaint • Control noise level should not exceed the limit • Carry out the work in working hours only • Use low noise and vibration equipment • Reduce heavy machinery and vehicles movement inside the facility, into or out of the facility • Maximum supervision from the project manager on the activity	• Reduce heavy machinery and vehicles movement inside the facility, into or out of the facility • Maximum supervision from the project manager on the activity
• Welding • Leaking of fuels from vehicles		*Impact of fire or/and explosion to community*	• Eliminate activities that cause fire or explosion during the construction • inform neighbours prior to perform any work associated with fire hazards • Develop a grievance procedure to ensure fair and prompt resolution of problems arising from the project. • Maintain full written records of each grievance case and the associated process of resolution and outcome for transparent, external reporting. • Regular inspections of escape routes & fire safety signage • Fire extinguisher and first aid kit should be made available at all times Make sure Workers are above to use fire extinguisher • Provide emergency contact number in the facility and make the Workers aware of it • Maximum supervision from the project manager on the activity	• Suspend or stop the work temporarily when there is fire • Use proper fire extinguisher when there is fire in the facility • Contact emergency numbers immediately for assistance when fire is out of control before it spread to community house or facilities • Evacuate community to safe place • Immediate treat the unserious injured Workers • Evacuate the serious injured Workers to nearest hospital or clinic, contact emergency number for evacuation immediately • Maximum supervision from the project manager on the accident or incident	• Investigate what causes the fire or explosion • Fair compensation to the Workers if necessary • Maximum supervision from the project manager on the activity
• Leaking of fuels and lubricant from	**Soil quality, Water quality (both**	*Soil, surface water and groundwater pollution due to*	• Regular inspection to construction vehicles and heavy machineries should be regularly done	• Project manager should be notified when construction vehicles or heavy	• Ensure availability of spill clean-up materials (e.g., Absorbent pads, etc.)

movement of vehicles and use of heavy machineries	**groundwater and surface water)**	*leak of fuel and lubricant and construction*	• All construction vehicles and heavy machineries should be properly maintained to prevent leaks. • Any accidental spill or leakage of substances (e.g. oil and lubricants) has to be cleaned promptly using proper procedure and equipment and should be disposed of in designated location • Notify environmental authority for any contamination cause • Ensure availability of spill clean-up materials (e.g., Absorbent pads, etc.) specifically designed for petroleum products and other hazardous substances Maximum supervision from the project manager on the activity • Maximum supervision from the project manager on the activity	machineries leak • Leaking construction vehicles or heavy machineries should undergo maintenance right away when it is found. • Maximum supervision from the project manager on the activity	specifically designed for petroleum products and other hazardous substances Maximum supervision from the project manager on the activity • Remediation must be undertaken when contamination is detected • Maximum supervision from the project manager on the activity
• Poor management of the construction site		*Soil, surface water and groundwater pollution due construction*	• Install sediment retention structure around the project site to capture sediments in the raining season • Limit vehicles movement during rainy day • Avoid working during raining • Maximum supervision from the project manager on the activity	• Install sediment retention structure around the project site to capture sediments in the raining season • Limit vehicles movement during rainy day • Suspend or Stop working when it is raining • Maximum supervision from the project manager on the activity	• Install sediment retention structure around the project site to capture sediments in the raining season • Limit vehicles movement during rainy day • Maximum supervision from the project manager on the activity
• Construction activity	**Ecological Impact**	*Impact on Vegetation and animal*	There might be very low or zero impact negative of the construction of project on vegetation and animals		
• Construction activities • Waste production	**Economic and agriculture impact**	*Impact on economic and agricultural activities*	• Inform the landowners before dumping soil or rock and other materials on lands • Avoid dumping soil or rocks and other material on community agricultural land • Adequate signage and security provided at the site • Wastes should be managed properly and	• Suspend or stop the work temporarily when these is complaint • Resolve the complaint in a proper manner • Inform the relevant authorities if there is	• Let the relevant authority investigate people of involve in physical confrontation • Fair Compensate if necessary • inform the workers to

			disposes at designated location • Maximum supervision from the project manager on the activity	physical confrontation involved during the complaint • Clean the wastes and disposed at the designated location • Maximum supervision from the project manager on the activity	manage and dispose wastes at designated location • Maximum supervision from the project manager on the activity

OPERATION PHASE

Activities	Impacts	Parameter/ particular concerns	Preventive action	Control and responding action	Corrective action
• Vehicles movement (costumers and company's) in and out of the facility • Use of backup generator • Wastes production and burning	**Air quality**	Dust(particulate matter) and Flue gasses/ exhaust gasses impact on air quality	• Visual inspection should be conducted regularly on the floor for dust • Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Set a vehicles speed limit in the facility • Regularly clean dust of the floor in the facility area • Establish speed limits to vehicles operate inside and outside the project area and the speed limit sign should be temporarily installed in the project to remind the drivers. • All delivery tankers should be adequately maintained to reduce exhaust emissions • Discourage idling of vehicles engines in the facility to reduce exhaust emission • Wastes should not be burnt onsite ,but managed properly and disposed at designated location • Proper wastes management sign must be displayed in the facility • Regular maintenance of backup generator to reduce emission • Maximum supervision from the facility manager on the activity	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce vehicle speed in the facility • Regularly clean the dust on the floor in the facility area • Turn off unnecessary idling of vehicles in the facility area • Vehicle speeds in the fuel filling area will be limited to minimize vehicle smoke in the area • Suspend or Stop using vehicles or/and generator that emit too much flue gasses • Clean the wastes and disposed at the	• Visual inspection should be conducted regularly on floor for dust • Regularly clean the dust on the floor in the facility area • Encourage drivers to turn off unnecessary idling of vehicles in the facility area • Regular maintenance to the facility company's vehicles and generator should done • inform the drivers to operate vehicles according to the established speed limit • inform workers to

				designated location • Maximum supervision from the facility manager on the activity	manage and dispose the wastes of at the designated location • Proper wastes management sign must be displayed in the facility • Maximum supervision from the facility manager on the activity
• Storing fuel in underground storage tanks • Refilling/dispensing of fuel to customer vehicle • Loading of fuels to underground storage tank		Volatile Organic compounds (VOCs) impact on air quality	• Make sure that underground tank seals are kept in good condition and caps are appropriately sealed • Ensure that fuel nozzles cut off automatically when tank is full • A competent person must remain near the tanker during unloading • Regular monitoring and inspect for leaking from pipework, dispensers and tanks, and implementing repairs within predefined period • Pressure vacuum vent should be used to avoid continuation of the releasing of gasses from the tanks. • All staff should ensure that dispensers hoses are not laid on the filling area and pump island floor at any time • Regular check the vapour control systems and make sure that they are in good condition • Maximum supervision from the facility manager on the activity	• Conduct maintenance to leaking pipework, dispenser, tanks and vapour control system if found damaged and corroded • Maximum supervision from the facility manager on the activity	• Limit exposure to products and materials that contain VOCs. • Conduct inspection regularly to detect leaks from pipework, dispensers and tanks • Maximum supervision from the facility manager in the activity
• Vehicles movement (Costumers and company's) • Use of backup generator	**Workers' Occupational Health and Safety (OHS)**	Dust (Particulate matter) and Flue gasses/ exhaust gasses impact on	• Visual inspection should be conducted regularly on the floor for dust • Regular spray dusty area using water to suppress dust from suspend in the air • Regularly clean dust of the floor in the facility area	• Regular spray dusty area using water to suppress dust from suspend in the air • Reduce vehicle speed • Provide proper PPE to	• Visual inspection should be conducted regularly on floor • Provide proper PPE to workers • Limit employee

• Wastes production and burning		workers	• Provided proper PPE to Workers and Workers should wear the PPE when it is dusty in facility area • All delivery tankers should be adequately maintained to reduce exhaust emissions • Vehicle speeds in the facility should be reduced to minimize vehicle smoke in the area • Establish speed limits to vehicles operate inside and outside the project area and the speed limit sign should be installed in the facility to remind the drivers. • Discourage idling of vehicles' engines to reduce exhaust gasses emission • Wastes should not be burnt in the facility, but managed properly and disposed of at the designate location • Prepare and provide PPE to workers if flue gasses are from outside of the facility • Proper wastes management sign must be displayed at project site • Regular maintenance of back-up generator and company's vehicles to reduce emission • Maximum supervision from the facility manager on the activity	workers • Regularly clean the dust on the floor in the facility area • Turn off unnecessary idling of vehicles in the facility area • Suspend or Stop using vehicles or/and generator that emit too much flue gasses • Staffs should remind and reprimand driver when not follow establishes speed limit • Clean the wastes and disposed at the designated location • Maximum supervision from the facility manager on the activity	exposure to dust, where required • Regularly clean the dust on the floor in the facility area • Encourage drivers to turn off unnecessary idling of vehicles in the facility area • Regular maintenance to the facility company's vehicles and generator should done • Remind worker to manage and dispose the wastes of at the designated location • Proper wastes management sign must be displayed in the facility • Maximum supervision from the facility manager on the activity
• Storing fuel in underground storage tanks • Refilling/dispensing of fuel to customer vehicle • Loading of fuels to underground storage tank		Volatile organic compounds (VOCs) impact on workers	• Underground storage tanks to be fitted with respirators or vent lines and have a minimum height of 4 meter above ground level • Make sure that underground tank seals are kept in good condition and caps are appropriately sealed • Ensure that fuel nozzles cut off automatically when tank is full • A competent person must remain near the tanker during unloading • Regular monitoring and inspect for leaking from pipework, dispensers and tanks, and implementing repairs within predefined period • Pressure vacuum vent should be used to avoid continuation of the releasing of gasses from the tanks.	• Conduct maintenance to leaking pipework, dispensers, tanks and vapour control system if found damaged and corroded • Ensure rotating pumps attendants to prevent them from inhaling fuel vapour (gas) for long time • Proper PPE should be provided and Workers should wear the PPE when there is present	• Limit exposure to products and materials that contain VOCs. • Conduct inspection regularly to detect leaks from pipework, dispensers and tanks • Operator must Avoid Breathing in low levels of VOCs for long periods • Proper PPE should

			• All staff should ensure that dispensers hoses are not laid on the filling area and pump island floor at any time • Regularly check the vapour control systems and make that they are in good condition • Proper PPE should be provided and Workers should wear the PPE • Maximum supervision from the facility manager on the activity	of VOCs • Maximum supervision from the facility manager on the activity	be provided and Workers should wear the PPE • Maximum supervision from the facility manager on the activity
• Over use of electricity components • Electrical components Inspection		Workers electrical related work accident or incident	• Conduct daily Inspect ion to electrical system • Use safe work practices every time electrical equipment is used. • Know the location and how to operate shut-off switches and/or circuit breaker panels • Prevent the potential for water or chemical spills on or near electrical equipment • Proper PPE should be provided and Workers should wear the PPE before carrying out inspection • Inspection should be carry out only by competent and experienced staff • First aid kit should be provided at the facility • Maximum supervision from the facility manager on the activity	• Suspend or stop the operation temporarily when there is electrical accident or incident • Treat unserious injury • Evacuate serious injured Workers to nearest hospital or clinic or contact emergency number for evacuation assistance • Maximum supervision from the facility manager on the activity	• First Aid kits will be provided and placed at strategic locations to allow access to the workers in case of an accident • Let the injured victim recover completely before resume to work • Compensate the Workers if necessary • Conduct daily inspection to electrical system • Maximum supervision from the facility manager on the activity
• Dispensing fuel		Exposure to extreme heat by workers	• Cease the work temporarily when temperature is extremely hot • Workers must adjust to exposure until body is acclimated to the heat • Workers should take break according to resting schedule • Do not ignore possible symptoms of heat stress • Use proper PPE before working during extreme heat • Water should be provided in the work site • Workers should regularly drink water to stay hydrated • Notify supervisor of any personal risk factors	• Notify supervisor of any personal risk factors • Applied first aid to treat Workers that suffer from unserious heat stress or dehydration • Evacuate Workers that suffer from serious or severe heat stress or dehydration to nearest hospital or clinic or	• Proponent must provide PPE for all Workers • Let the workers fully recover before resume to work • Compensate the Workers if necessary • Maximum supervision from the facility manager on the activity

			• Maximum supervision from the project manager on the activity	contact ambulance for evacuation assistance • Maximum supervision from the facility manager in the activity	
• Vehicles movement in and out of the facility		Traffic jam and traffic accident in the facility	• Conduct regular briefing before operation • Assigned staff to direct the traffic in the facility during peak hours • Display Speed limit sign for costumers vehicles, tankers and motorbike enter and leave the facility at the accessible location • Marking parking spot properly for general parking in the facility • Parking spot for refuelling at the pump islands should be clear • Parking spot for fuel delivery truck should be marked clearly • Car washing area should not be inclined to avoid involuntary move by cars that can cause accident or incident in the facility • Car wash spot should be located far from the exit and entry gates to avoid traffic jam and accident • Provide emergency contact number in the facility and make staffs aware of it • Provide first aid kit in an accessible location and make staffs aware of it • Maximum supervision from the facility manager on the activity	• Suspend or stop the operation temporarily when there is accident or incident • Direct traffic away from the accident spot • Apply first aid to treat unserious injured Workers • Evacuate serious injured Workers to nearest hospital or clinic or contact ambulance for evacuation assistance • Maximum supervision from the facility manager on the activity	• Conduct a safety meeting regular basis • Let the Workers recover completely before resume to work • Maximum supervision from the facility manager on the activity
• Welding facility's components		Mechanical work related accident or incident, fire and explosion	• Welding within the facility is prohibited at anytime	•	•
• Unloading of fuels from tankers into storage tanks • Dispensing of fuels from underground storage tanks into vehicles' tank • Leak from dispenser, storage		Fire and explosion in the facility impact on workers, costumers and facility	• Relevant operational staff must receive training on the correct operation of the storage tanks, as well as maintenance and repair procedures when leaks are detected. • Procedure for unloading fuels from tankers into underground storage tanks should be written on a board and display close to the unloading of fuel into storage tanks location where the unloader can see and follow • Procedure for dispensing fuels into vehicles' tanks	• The correct PPE should be worn in the facility area to combat fire. • Suspend or stop the operation temporarily when there is fire in the supporting office, dispensers, pump island and storage	• Investigate the cause of the fire and explosion • Provide proper fire extinguishers • Emergency contact numbers must be made available at facility • Ensure all staff are

tanks and fuel pipes • Smoking and using cell phone • Electrical failure			should be written on a board and display close to each pump islands where the pump attendants can see and follow • Appropriate Health & Safety signage must be placed on and around the tank. • The fuel filling station should be equipped with fire extinguishers should be available on site and are regularly maintained • The facility should have a fire contingency plan which are made aware to all the employees • Pump attendants can only begin refilling the vehicle's fuel tank after the engines and ignition sources have been fully cut off • During the bulk fuel delivery, a competent person must be present until the delivery process is completed. Before the delivery process start, buckets of sand and fire extinguishers shall be made easily available and accessible. • During operation of unloading/ refuelling from tanker to the storage tanks, the tanker must have parked at the properly marked area and all circulation of people and other vehicles within the area is strictly prohibited and must be prevented. • Overfill and spillages during tanker refuelling and fuel dispensing should be prevented by the installation of automatic cut off devices. • Tanker delivery drivers must be present during delivery of fuel with the emergency cut off switch and a fire extinguisher. • A closed coupling must be used when fuel is being transferred from the bulk delivery vehicle to the USTs to prevent fugitive emissions. • Costumers and staffs' cell phones should be switched off during fuel dispensing, unloading of fuel into storage tanks • No Smoking and Using Cell Phone signs should be displayed in the facility • Staffs should reprimand costumers when smoking and using cell phone in the facility and during dispensing of fuel in to vehicles' tanks • All staff should ensure that dispensers' hoses are not laid on the filling area and pump island' floor at any time.	tanks areas • Sounding the emergency drill when the fire cannot be contained • Evacuate Workers and costumers to safe place • Switch off the emergency valve • Extinguish the fire with proper fire extinguishers right away when there is fire • Contact emergency number for assistance when the fire is out of control • Maximum supervision from the facility manager on the activity	attended refreshment training • Prepare and provide PPE to staffs • Practice emergency drill • Ensure all costumers are follow safety procedure • First aid kits must be made available • Safety sign must be display at facility • Compensate the workers or costumers if necessary • Maximum supervision from the facility manager on the activity

			• Internal visual inspection on pipework, electrical system and dispensers should be regularly conducted for the condition such as leakage, deterioration, and corrosion (for pipework) • Authority should be notifying when there is leak from pipework, dispensers and tanks • The correct PPE should be used on the site. • All Workers should be made aware of all emergency contact numbers. • Practice emergency drill • All staffs (including pumps attendants) must attend training refreshment training on first aid, safety and firefighting training and have trainings certificates • Facility electrical system should be equipped and protected with grounding system • An emergency response plan must be available on site and employees must be familiar with the plan. • The facility should have a fire contingency plan which are made aware to all the employees • Maximum supervision from the facility manager on the activity		
• Burning houses • Trash burning • Bush fire		Impact of Fire or/and explosion from surrounding to facility	• Notify surrounding community about the hazard of fire to the facility • Make sure that community fire is not out of control • Contact fire department when a community house is on fire or fire set up by community is out of control • Ask community not to set up fire near the facility • Staff should put out community fire it is out of control • Perform general housekeeping tasks on a regular basis • Fire extinguisher should be made available at all the time at the facility • Prepare and provide PPE to all workers to combat fire just in case fire outside the facility is out of control • Practice emergency drill • Maximum supervision from the facility manager on the activity	• Suspend or stop the operation temporarily when fire outside of the facility cannot be contained • Sounding the emergency drill when community' fire is out of control and cannot be contained • Evacuate serious Workers or costumer suffer from burnt to hospital or clinic • Switch off the emergency valve • Wear Proper PPE to combat fire • Extinguish the fire with proper fire extinguishers right	• Ensure all costumers are follow safety procedure • First aid kits must be made available • Prepare and provide proper PPE • Provide fire extinguishers • Emergency contact numbers must be made available at facility • Ensure all staff are attended refreshment training • Ensure all costumers are follow safety

				away when there is fire • Contact emergency number for assistance when the community fire affect the facility • Maximum supervision from the facility manager on the activity	procedure • Safety sign must be display at facility • Practice emergency drill • Maximum supervision from the facility manager on the activity
• Vehicles movement (Costumers and company's) in and out of facility • Use of backup generator • Waste production and burning	**Social Impact (community health and safety)**	Dust (particulate matter) and Flue gasses/ exhaust gasses impact on community	• Visual inspection should be conducted regularly on the floor for dust • Minimize bare surface in the facility area • Regular spray dusty area using water to suppress dust from suspend in the air • Regularly clean dust of the floor in the facility area • All delivery tankers should be adequately maintained to reduce exhaust emissions • Company's vehicle speeds outside the facility should reduce to minimize vehicle smoke and dust in the area • Establish speed limits to vehicles operate inside and outside the project area and the speed limit sign should be temporarily installed in the project to remind the drivers. • Discourage idling of vehicles' engines to reduce exhaust emission • Regular maintenance of back-up generator to reduce emission • Wastes should not be burnt on sites, but managed and disposed at designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the facility manager on the activity	• Regular spray dusty area using water to suppress dust from suspend in the air • Reduce vehicles' speed inside and outside the facility • Regularly clean the dust on the floor in the facility area • Turn off unnecessary idling of vehicles in the facility area • Remind and reprimand driver to reduce speed in the facility • Suspend or Stop using gasses emitter generator and vehicles • Clean the wastes and disposed at the designated location • Maximum supervision from the facility manager on the activity	• Visual inspection should be conducted regularly on floor • Regularly clean the dust on the floor in the facility area • Reduce vehicles' inside and outside the facility • Encourage drivers to turn off unnecessary idling of vehicles in the facility area • Regular maintenance to the facility's vehicles and generator should done • Remind workers manage and dispose the wastes of at the designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the facility manager on the activity

• Storing fuel in underground storage tanks • Refilling/dispensing of fuel to customer vehicle • Loading of fuels to underground storage tank		Volatile Organic compounds (VOCs) impact on community	• Underground storage tanks to be fitted with respirators or vent lines and they are to be fitted such that facing away from the neighbouring residential areas and have a minimum height of 4 meter above ground level • Inspect vent pipe's base for sign of corrosion or damage and conduct maintenance straight away when it is found corroded and damaged • Make sure that underground tank seals are kept in good condition and caps are appropriately sealed • Ensure that fuel nozzles cut off automatically when tank is full • A competent person must remain near the tanker during unloading • Regular monitoring and inspect pipework, dispensers and tanks to detect leaks and implementing repairs within predefined period • Pressure vacuum vent should be used to avoid continuation of the releasing of gasses from the tanks. • All staff should ensure that dispensers hoses are not laid on the filling area and pump island floor at any time • Maximum supervision from the facility manager on the activity	• Conduct maintenance to leaking pipework, dispenser, tanks and vapour control system if found damaged and corroded • Ensure rotating pumps attendants to prevent them from inhaling fuel vapour (gas) for long time • Maximum supervision from the facility manager on the activity	• A competent person must remain near the tanker during unloading • Limit exposure to products and materials that contain VOCs. • Operator must Avoid Breathing in low levels of VOCs for long periods • Regular monitoring and inspect pipework, dispensers and tanks to detect leaks and implementing repairs within predefined period • Maximum supervision from the facility manager on the activity
• Vehicles movement (Costumers and company's) in and out of facility • Car washing		Traffic jam and traffic accident outside the facility (general traffic)	• Clear markings to set apart vehicle and pedestrians routes • Provide warning signs at all entrances and exits to the site. • The entry and exit of vehicles into and from the fuel filling station are made through one-way accesses to avoid traffic jam outside the facility • Parking of vehicles in facility's pathway is not permitted • Adequate entry of fuel tankers to the area for unloading and allow exit from the fuel filling station into a safe area by moving forward without the need of any manoeuvres to avoid traffic inside and outside the facility • Staff should direct the cars not to park in or near the entry and exit gates • Car wash area should not be near the entry and exit access	• Instruct the river to move vehicles that park near or at the entry and exit gates to avoid traffic jam and accident outside the facility • Staffs should direct cars and motorbikes that enter the facility during peak hours • Instruct drivers to reduce speed limit when entering and exiting the facility • When there is accident or incident causse by company's vehicles,	• Display sign of pedestrian & vehicle way inside and outside of the facility • Emergency contact must be made available at project site • Compensate if necessary • Company should toughen up the regulation or police control driver's behaviour • Maximum supervision from

			• Staffs should direct cars and motorbikes that enter the facility during peak hours • Clear markings to set apart vehicle and pedestrians routes • Provide designated safe zones for drivers to stand when unloading/loading activity is being undertaken. • Dedicated personnel must be presented to manage traffic and pedestrian movements outside facility during peak hour in the facility • Encourage drivers to walk the route and plan for manoeuvrability on sites • Manage the work hours and duration for drivers to minimize fatigue. • Implement a one-way system to reduce the need for vehicles to reverse on site. • Provide sign for safe movement of vehicles and people (pedestrian crossing areas, barriers, safe zones, walkways etc.). • Make parking spot for costumers should be separated to fuel delivery spot • Time deliveries for quiet times of the day to reduce the number of people who are likely to be near the vehicle being unloaded. • Provide emergency contact numbers in the company's vehicles • Control company's vehicles driver's attitude about driving • Make sure company drivers have first aid certificate • Ensure that drivers have the competency to operate the company's vehicles safely. • Company's driver should obey traffic signs and under no alcohol influence when driving • Set speed limit for company's vehicles operate outside the facility • Maximum supervision from the facility manager in the activity	driver should Suspend or Stop the vehicles and access the accident • Apply first aid to treat unserious injured victims • Evacuate serious injured people to nearest hospital or clinic or contact emergency number for evacuation assistance • Control company's vehicles driver's attitude about driving • Maximum supervision from the facility manager in the activity	the facility manager in the activity
• Vehicles movement (Costumers and company's) in and		Noise and vibration impact on community	• A grievance procedure will be established whereby noise complaints can be received, recorded and responded to appropriately. • Noise, especially at night, should be kept to a minimum.	• Control noise level to not exceed the limit during the day and at night • Resolve any complaint	• Remove people from vicinity of noisy area • Build wall to insulate the noise

out of facility • Unloading of fuel into storage tanks from fuel tankers			• Avoid loud background music that are clearly audible away from the forecourt • Avoid receiving fuels or other deliveries at night • Operation hours should be started in between 7am-8pm to avoid noisy at the facility and surrounding. • Display speed limit for vehicles in the facility to reduce noise • Conduct monitoring and inspection to company vehicles conditions and maintenance to avoid noise generation • Maximum supervision from the facility manager on the activity	from the community • Build a wall to insulate the noise from the facility • Maximum supervision from the facility manager on the activity	from the facility to reduce noise • Maximum supervision from the facility manager on the activity
• Unloading of fuels from tankers into storage tanks • Dispensing of fuels from underground storage tanks into vehicles' tank • Welding • Smoking and using cell phone • Electrical failure • Leak for dispenser, tanks and pipes		Impact of fire and explosion in the facility to community and community's houses	• Use the prevention action mitigation measures for impact of fire and explosion in the facility on workers, costumers and facility in this section to prevent impact of fire and explosion in the facility to community and community' houses	• Stop or Suspend the operation temporarily when there is fire in the supporting office, dispensers, pump island and storage tanks areas • Sounding the emergency drill when the fire cannot be contained • The correct PPE should be worn in the facility area to combat fire. • Evacuate community to safe place • Switch off the emergency valve • Extinguish the fire with proper fire extinguishers right away when there is fire • Contact emergency number for assistance when the fire is out of control • Maximum supervision from the facility	• Provide fire extinguishers in facility • Emergency contact numbers must be made available at facility • Ensure all staff are attended refreshment training • Compensate the community if necessary • Practice emergency drill • Maximum supervision from the facility manager on the activity

				manager on the activity	
• Spill of fuels during unloading of fuels from tanker into under storage tanks • Spill of fuel during dispensing of fuels from storage tanks into vehicles tanks' • Leaking of fuels from underground storage tanks • Leaking of fuels from pipework • Poor maintenance of wastewater treatment system, oil traps and catchers • Car washing	**Soil Quality and Water Quality (both groundwater and surface water)**	Soil, Surface water and Groundwater pollution due to fuels spill and leak	• Underground storage tanks must be placed in the concrete retention basin • USTs must have corrosion protection • Notice/warning signs are posted when fuels are being discharged into storage tanks • Spills must be cleaned up with the appropriate spill absorbent. • Overfill and spills during tanker unloading should be prevented • Any significant spills and leaks incidents must be reported to relevant authorities • USTs must be fitted with automatic leak detectors that alert management to a leak. • The oil/water separator must be inspected regularly to ensure that it is functioning at all times. • An impermeable surface ground (cemented) at the area dedicated to unloading fuel from tankers into the storage tanks and refueling area, and allow drainage into the water treatment system • Overfill and spillages during tanker refueling and fuel dispensing should be prevented by the installation of automatic cut off devices. • The accumulated contents in the oil/water separator must be removed and disposed into appropriate treatment system (absorb into sand dedicated for this purpose) • Accidental leakages and spills that may occur on the forecourt must be cleaned immediately using dry sand provided in some removable containers for each of fuel dispenser, which then must be properly disposed • For the purpose of detecting leak, the quantities of fuel delivered, stored and dispensed stock are monitored and recorded on daily basis, and records are kept on site • Tanker delivery drivers must be present during delivery of fuel with the emergency cut off switch. • In the event of the pump dispenser or the hoses being knocked over or ripped off, the fuel supply must be cut off by shear-off valves.	• When there leak is found in the pipework, dispensers and underground storage tanks, the operation should be ceased temporarily, and maintenance should conducted prior to resume the operation • Spills must be cleaned up with the appropriate spill absorbent. • Conduct regular monitoring of groundwater quality • Maximum supervision from the project manager on the activity	• Prepare emergency response plan • Conduct regular monitoring to ground water quality • Regularly use monitoring well for the inspection of leak from underground tank, • Update fuel stock inventory regularly • Provide basic clean up material • Remediation must be undertaken when contamination is detected • Compensate the workers surrounding community if oil leak from the facility destroy their properties • Maximum supervision from the project manager on the activity

			• Emergency response plan must be in place for the site, which clearly describes the procedures and include emergency contact numbers • All forecourt staff must undergo appropriate training, which must include training to prevent spillages during fuel dispensing. • The USTs, pipelines, dispensers and other associated infrastructure must be inspected regularly for leaks and to ensure structural integrity • A closed coupling must be used when fuel is being transferred from the bulk delivery vehicle to the USTs. • Use monitoring wells to monitor leakage in the underdoing tanks • All staff should ensure that dispensers hoses are not laid on the filling area and pump island floor at any time • Water from carwash area must be directed to proper drainage system • All the exposed pipework and other fitting (i.e., valves and bolts) should be visually inspected regularly for sign damages, leaks, deterioration or corrosion • Pipework should be tested for leakage before using for the operation • Underground pipework's connection and joints chamber should be installed for the inspection and maintenance. (Note: this would depend on the types pipe that is going to be used) • Make sure pipework joint's chambers have proper fitting lead to prevent ingress of water and other substance (Note: this would depend on the above mitigation measure) • Area within the facility should be cemented, unless it is advised otherwise by the authority • Provide appropriate drainage system to manage surface runoff • Adequate entry of fuel tankers to the area for unloading and allow exit from the fuel filling station into safe area by moving forward without the need of any maneuvers • Should use double layers pipe to prevent leaking		

			Note: this would depend on the pipe that is going to be used) • Procedure for unloading fuels from tankers into underground storage tanks should be written on a board and display close to the unloading of fuel into storage tanks location where the unloaded can see and follow • Procedure for dispensing fuels into vehicles' tanks should be written on a board and display close to each pump islands where the pump attendants can see and follow • A competent person must remain near the tankers during unloading • Authority should be notified when there is leak from pipework, storage tanks and dispenser. • Maximum supervision from the facility manager on the activity		
• Spill or leak • Fire or/and explosion	**Ecology impact**	Spill or leak and fired or explosion impact on vegetation and animals	• Use Preventive Mitigation Measures Action for soil, surface water and groundwater pollution for this section to prevent spill or leak • Use Preventive Mitigation Measures Action re or/and explosion in Workers' Occupational Health and Safety, Social Impact and Residents' Health and Safety in the Facility in this section for preventing fire or/and explosion	• Use Controlling and Responding Mitigation Measures Action for soil, surface water and groundwater pollution for controlling and responding spill or leak in this section • Use Controlling and Responding Mitigation Measures Action for fire or/and explosion in Workers' Occupational Health and Safety, Social Impact and Residents' Health and Safety in the Facility in this section for controlling fire or/and explosion	• Use Corrective Mitigation Measures Action for soil, surface water and groundwater pollution for this section to prevent spill or leak as corrective action for this section • Use Corrective Mitigation Measures Action for fire or/and explosion in Workers' Occupational Health and Safety, Social Impact and Residents' Health and Safety in the Facility as corrective action for this section

• Fire and explosion, and Spill or leak during operation • Waste production and burning	**Economic and agricultural impact**	• Fire and explosion, and Spill or leak impact on economic activity (kiosks, market, shops and agriculture activities) • Wastes	• Only trained and competent people do perform the maintenance • Make sure storage tanks, fuel pipes and dispenser are free of fuel prior to perform maintenance • Prepare and provide firefighting equipment • Spill or leakage of oil and lubricants should be cleaned promptly and should be disposed of in designated location • Waste should be managed properly and disposed of at the designated location • Provided emergency contact number in the facility and make worker aware of it • Maximum supervision from facility manager on the activity	• Suspend or Stop the activity temporarily when there is fire and complaint on wastes • Use proper fire extinguisher to put out fire • Contact fire departments for assistance when fire is out control and start affecting kiosks or shops or market • spill or leakage of oil and lubricants should be cleaned promptly and should be disposed of in designated location • Contact fire department when spill or leak affecting agricultural land or other property • Clean the wastes and dispose it at designated location • Maximum supervision from facility manager on the activity	• Investigate the cause of fire or/and explosion, spill or leaks • Compensate the affected people if necessary • Remind workers to manage the wastes properly and dispose of at the designated location • Maximum supervision from facility manager on the activity

MAINTENANCE PHASE

Activities	Impacts	Parameter/ particular concerns	Preventive action	Control and responding action	Corrective action
• Vehicles movements (in and out of the facility) • Concrete mixture for floor, wall and other infrastructures in the facility maintenances • Use of machineries • Use of backup generator • Waster production and burning	**Air quality**	Dust (particulate matter) impact on air quality Flue gasses/ exhaust gasses impact on air quality	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Regular maintenance for vehicles, equipment and back-up generator to avoid emission into air • Turn off unnecessary idling engines of vehicles and equipment • Turn off unneeded back-up generator • Establish speed limits to vehicles operate inside and outside the project area and the speed limit sign should be temporarily installed in the project to remind the drivers. • Reduce vehicles speed in the facility to minimize flue gasses emission and dust suspension • Wastes should not be burnt onsite, but managed properly and disposed of at the designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the project manager on the activity	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce vehicle speed on site and outside • Proper maintenance to vehicles and equipment, and back-up generator • Suspend or Stop using gasses emitter generator, vehicles and equipment • Clean the wastes and dispose at the designated location • Maximum supervision from the project manager on the activity	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Conduct maintenance to equipment, vehicle and generator regularly • Remind the drivers to drive according to the established speed limit • Remind workers to manage and dispose the wastes of at the designate location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the project manager on the activity
• Dispenser, pipework and underground storage tanks maintenance		Volatile Organic compounds impact on air quality	• The release of the volatile organic carbon cannot be prevented during maintenance	• The release of the volatile organic carbon cannot be prevented during maintenance	• The release of the volatile organic carbon cannot be prevented during maintenance
• Vehicles movements (in and out of the facility) • Concrete mixture floor, wall, pump island maintenances • Waster production and burning	**Workers' Occupational health and Safety (OHS)**	Dust and flue gasses (particulate matter) and flue gasses impact on Workers	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Limit vehicle speeds onsite to minimize dust and flue gasses generation • Establish speed limits to vehicles operate inside and outside the project area and the speed limit sign should be temporarily installed in the project to remind the drivers. • Prepare and provide proper PPE to Workers • If possible install fence to contain dust in the work area only • Suspend or Stop using too much flue gasses	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce vehicle speed on site and outside • Suspend or Stop using too much flue gasses emitter vehicles and machineries • Conduct regular maintenance to flue	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Suspend or Stop using too much flue gasses emitter vehicles and machineries • Conduct regular maintenance to flue gasses emitter vehicles and machineries • Provide PPE to workers

			emitter vehicles and machineries • Conduct regular maintenance to flue gasses emitter vehicles and machineries • Wastes should not be burnt in the facility but should managed and disposed at the designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the project manager on the activity	gasses emitter vehicles and machineries • Clean the wastes and dispose at the designated location • Workers should wear proper PPE • Maximum supervision from the project manager on the activity	• Remind the drivers to drive not over the established speed limit • Remind workers to manager and dispose the wastes of at the designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the project manager on the activity
		Noise and vibration impacts to community	• Work should occur during day hours only between 08:00Am-5:00Pm, on week days only. • Worker should wear the appropriate PPE, if and when required. • The contractor will adhere to local authority by-laws relating to noise control. • Take turn when operating noise machineries and rest accordingly • Utilized equipment with one lower vibration and noise emission to ensure that the permissible occupation noise-rating limit of 85 dBA is not exceeded. • All equipment to be adequately maintained and kept in good working order to reduce noise. • All noise generating equipment should be insulated and well maintained to ensure that they operate within the noise limits they were designed to operate • Maximum supervision from the facility manager on the activity	• Control noise level should not exceed • If the maintenance equipment is too noise, Workers should wear proper PPE • Take turn when operating noise machineries and rest accordingly • Maximum supervision from the facility manager on the activity	• Make sure only maintenance Workers at noisy area • If possible use equipment with low noise • Maximum supervision from the facility manager on the activity
		Traffic jam and accident or incident inside the facility	• Display speed limit sign in the facility • Staff should direct vehicles enter the facility properly • Staff should instruct drivers not to park vehicles in the entry and exit gates	• Suspend or stop the work temporary if there is accident or incident • Apply first aid to treat unserious injured workers	• Investigate cause of the accident or incident • Let the workers recover properly before resume to work • Compensate the work if

			• Clearly marking the maintenance sites • Barricade the maintenance sites • Provide PPE in the facility • Provide first aid kits in the facility • Provide emergency contact number in the facility and make workers aware of it • Maximum supervision from the facility manager on the activity	• Evacuate serious injured workers to nearest hospital or clinic or contact emergency number for evacuation assistance • Maximum supervision from facility manager on the activity	necessary • Maximum supervision from the facility manager on the activity
• Underground storage tanks maintenance • Fuel pipe Maintenance • Dispenser maintenance		Workers Accident or incident(injuries)	• Barricade the maintenance site • Company should only allow experienced staffs or consultants to do the maintenance • Proper PPE should be worn before carrying out activity including cleaning the underground storage tanks • Workers should in good condition and under no alcohol influence when carry out maintenance • Only allow trained and experienced workers to access into underground storage tanks for inspection and maintenance • Carry out maintenance according to the specification recommendation • Emergency contact numbers should be provided in the facility and make the Workers aware of it • Provide first aid kit in an accessible location in the facility • Inspections on the underground tanks fuel pipes and dispensers' condition should be recorded and made available to relevant authority up on request • All the record of maintenance and repair of underground storage tanks should be made available on site for external audit purpose, if the authority requested. • Make sure to in a team of two or more	• Suspend or stop the work temporarily when there is accident or incident • Evacuate injured to safe place • Apply first aid to treat unserious injured workers • Evacuate serious injured workers to nearest hospital or clinic or contact emergency number for evacuation assistance • Maximum supervision from the facility manager on the activity and injured Workers	• Investigate the cause of the accident or incident • Let the Workers or consultant recover properly before resume to work • Compensate the Workers if necessary • Maximum supervision from the facility manager on the activity and injured Workers

			• Maximum supervision from the facility manager on the activity		
		Exposure to extreme heat during maintenance of underground storage tanks, fuel pipe and dispensers	• Proper PPE should be provided the company • Proper PPE should be worn before carrying out maintenance • Suspend or stop the work when temperature is extremely hot • Water or other alterative drink for hydration should prepared • Work should drink water or other alternative drink regular to stay hydrated • First aid kit should be prepare and located in accessible place • Emergency contact number should be provided and Workers should be made aware of it • Make sure to in a team of two or more • Maximum supervision from the facility manager on the activity	• Suspend or stop the work temporarily when there is accident or incident • Evacuate injured to safe place • Apply first aid to treat unserious dehydrated and heat stress Workers • Apply first aid and Evacuate serious dehydrated or/and heat stress workers to nearest hospital or clinic or contact emergency number for evacuation assistance • Maximum supervision from the facility manager on the activity and injured workers	• Investigate the cause of the accident or incident • Let the workers or consultant recover properly before resume to work • Compensate the workers if necessary • Maximum supervision from the facility manager on the activity and injured workers
		Volatile Organic compounds underground storage tanks, fuel pipe and dispenser	• Make sure that underground storage tanks, pipe and dispenser are free of VOCs before carrying out maintenance • Only allow trained or/and experienced workers to carry out maintenance • Company should provide proper PPE • Make sure proper PPE is worn before access into underground storage tanks • Make sure to in a team of two or more when	• Suspend or stop the activity right away temporarily when Volatile Organic carbon is still present in the underground storage tanks, fuel pipe and dispensers • Apply first aid to workers who suffer from VOCs or/and contact	• Let the workers recover properly before resume to work • Compensate the workers if necessary • Maximum supervision from the facility manager on the activity

			cleaning underground storage tanks • First aid kit should be provided by the company in an accessible location • Maximum supervision from the facility manager on the activity	emergency number for evacuation • Maximum supervision from the facility manager on the activity	
		Fire and explosion during underground storage tanks, fuel pipe and dispensers maintenances	• Make sure that underground storage tanks, fuel pipes and dispensers are empty before carrying out maintenance • Maintenance, modifications and repairs to storage tanks, dispensers and fuel pipes should be carried out only by experienced workers • Make sure that there is no accumulated gas in the tanks or fuel pipes or outside of the tank and fuel pipes before carrying out maintenance • Avoid smoking while carrying out maintenance • Disconnect electrical system connect to storage tanks and dispenser before carrying out maintenance • Maintenance signage should be displayed before carrying out the activity • Restrict vehicles from entering the facility during maintenance • Barricade the maintenance site • During the maintenance of underground storage tanks, dispensing of fuels into vehicles' tanks should be Suspend or Stopped • During the maintenance of underground storage tanks, delivery of fuels from tankers to underground tanks should be Suspended or stopped • During the maintenance of fuel pipes, dispensing of fuel into vehicles' tanks and delivery of fuels into underground tanks should be Suspend or stop temporarily • PPE should be worn when carry out maintenances • Welding in the facility is prohibited • Provide emergency contact numbers and make workers aware of it	• Suspend or stop the activity temporarily when there is accumulated gasses in or/and outside the tanks and in fuel pipes • Suspend or stop the activity temporarily when there is fire • Evacuate injured workers to safe • Apply first aid to unserious injured workers • Evacuate serious injured workers to nearest hospital or clinic or contact emergency number for evacuation assistance • Maximum supervision from facility manager on the activity	• Investigate source of the fire • Let the workers or consultant fully recover before resume the work • Compensate the workers if necessary • Maximum supervision from the facility manager on the activity

			• Provide first aid kit in accessible location • The record for any work carried out on pipework should include the inspection on the pipework as well • Prepare and provide firefighting equipment and only allow trained and certified worker operate it • Do not allow damaged dispensers to be used/activated • Control ignition sources in hazardous area. • Staffs should not activate dispensers when potential ignition sources are present. • It is recommended that staffs should ensure that dispensers' hoses are not laid on the pump island's floor at anytime • During the maintenance of dispensers, dispensing fuel into vehicles' tanks should be Suspended or stopped • During the maintenance of dispensers, delivery of fuel into underground storage tanks should be Suspend or Stopped • After maintenance, dispensers should be tested before use for operation • Dispenser should be calibrated according to specification recommendation and only by authorised authority • Inspection to pipes and dispensers should be conducted regularly for leaks and deterioration • Keep a record of any work carried out on fuel pipe, storage tanks and dispensers • Make sure to in a team of two or more • Maximum supervision from the facility manager on the activity		
• Canopy, fence, floor and/or, supporting office • Work at height		Accident or incident related to maintenance	• Maintenance should be carried out by trained and experienced workers or contractor • Proper PPE should be warn before maintenance activity • Develop and implement plans for maintenance of the facility • Barriers and guards as necessary to protect employees, and visitors from physical hazards.	• Suspend or stop the work temporary if there is accident or incident • Apply first aid to treat unserious injured workers	• Investigate cause of the accident or incident • Let the workers recover properly before resume to work • Compensate the work if

			• Safety Signs are required to place during maintenance activity. • Establish an environmental record keeping system. • Ensure that activity should be Suspend or Stopped when canopy is under maintenance • Ensure that barricade is used to prevent people entering the pump islands when canopy is under maintenance • Barricade should be used around floor maintenance site's; the same to walls and fences • Signage should display when carry out any maintenances in the facility • Working at height should in a team of two or more • Make sure working at height apparatus are worn before start working, • Ensure structure for working at height are installed before start working • Maximum supervision from facility manager on the activity	• Evacuate serious injured workers to nearest hospital or clinic or contact emergency number for evacuation assistance • Maximum supervision from facility manager on the activity	necessary • Maximum supervision from the facility manager on the activity
		Exposure to extreme heat	• Suspend or stop the work temporarily when temperature is extremely hot • Workers must adjust exposure until body is acclimated to the heat • Workers should take break according to working schedule • Do not ignore possible symptoms of heat stress • Use proper PPE • Water should be provided in the work site • Workers should regularly drink water to stay hydrated • Make sure to in a team of two or more • Maximum supervision from the project manager on the activity	• Notify supervisor of any personal risk factors • Applied first aid to treat workers that suffer from unserious heat stress or dehydration • Evacuate workers that suffer from serious heat stress or dehydration to nearest hospital or clinic or contact emergency number for evacuation assistance • Maximum supervision from the project manager on the activity	• Provide PPE to all Workers • Let the worked fully recover before resume to work • Compensate the workers if necessary • Maximum supervision from the project manager on the activity
• Electrical system maintenance		Electrical related work accident or incident injuries	• Company should only allow experienced Workers or contractor to the maintenance to electricity	• Suspend or stop the activity temporarily when there is accident or incident related to	• Investigate the cause of the accident or incident • Let the worked fully

			• Disconnect part of the electrical system that need to undergo maintenance from the main circuit before carrying out the activity • Make sure to use electricity only after the maintenance is done • Make plan not to use of electricity when electrical components are under maintenance • Proper PPE should be worn before carrying out maintenance activity • Maintenance activity should done in team • Emergency contact number should be provided and make workers aware of it • Provide first aid kit in accessible location • Make sure to in a team or two or more • Maximum supervision from facility manager on the activity	electricity • Evacuate workers or contactor to safe place • Apply first aid to treat unserious incurred workers or contractor • Evacuate serious injured workers or contractor to nearest hospital or clinic or contact emergency number for evacuate assistance • Maximum supervision from facility manager on the activity	recover before resume to work • Compensate the workers if necessary • Maximum supervision from the facility manager on the activity
		Electrical related Fire risk and explosion accident or incident	• Company should only allow experienced Workers or contractor to the maintenance to electricity • Make sure to use electricity only after the maintenance is done • Make plan to minimise the use of electricity when electrical components are under maintenance • Proper PPE should be worn before carrying out maintenance activity • Disconnect part of the electrical system that need to undergo maintenance from the main circuit before carrying out the activity	• Suspend or stop the activity temporarily when there is fire • Evacuate workers or contractor to safe place • Apply first aid to unserious injured workers or contractor • Evacuate serious injured workers contractor to nearest hospital or clinic • Maximum supervision from facility manager on the activity	• Investigate the cause of the fire • Let the workers recover completely before resume to work • Fire extinguisher should be provided for the activity • Proper PPE should be provided for the activity and should be worn before the activity • Compensate the workers if necessary • Maximum supervision from facility manager on the activity

			• Proper PPE should be worn before carrying out the activity • Know the location and how to operate shut-off switches and/or circuit breaker panels • Minimize the potential for water or chemical spills on or near electrical equipment. • Test the electrical system before using it • provide proper fire extinguisher new the maintenance location • Make sure to in a team of two or more • Maximum supervision from facility manager on the activity		
• Vehicles movements (in and out of the facility) • Concrete mixture for floor, wall and other infrastructure maintenances • Vehicles movements (in and out of the facility) • Use of machineries • Use of backup generator • Wastes production and burning	**Social Impact (community health and safety impact)**	Dust (particulate matter) impact on surrounding community Flue gasses/ exhaust gasses impact on community	• Regular spray dusty area using water to suppress dust from suspend in the air • Establish speed limits to vehicles operate inside and outside the project area and the speed limit sign should be temporarily installed in the project to remind the drivers. • Make sure that dusty floor in the facility is regularly cleaned to avoid accumulation of dust • Concrete mixture should be properly done to avoid cement powder from carrying by the wind, particularly during windy day • Suspend or Stop using out of control flue gasses vehicles, machineries and generator • Regular maintenance for vehicles and equipment to avoid gasses emission • Turn off unnecessary idling of vehicles engines and machineries • Regular maintenance for back generator • Wastes should not be burnt in the facility, but managed properly and disposed of at designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the project manager on the activity	• Regular spray dusty area using water to suppress dust from suspend in the air • When there is complaint from the surrounding community Suspend or stop the work temporarily • Resolve to complaint before resume the activity • Suspend the work when during windy day • Contact emergency number if there is physical confrontation involved during complaint • Suspend or Stop using out of control flue gas vehicles, machineries and generator • Proper maintenance to construction vehicles,	• Let the police investigate people who involve in physical confrontation • Regularly wetting the dusty area to minimise dust from suspense in the air • Conduct regular maintenance to flue gasses emitter vehicles and machineries • Remind the drivers to drive not over the established speed limit • Remind the workers to managed and dispose wastes of at the designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the project manager on the activity

				equipment and generator • Clean the wastes and dispose of the at the designated location • Maximum supervision from the project manager on the activity	
• Vehicles movements (in and out of the facility) • Movement of people outside the facility		Traffic jam and accident outside of the facility (general traffic)	• Clear markings to set apart vehicle and pedestrians routes; • Dedicated personnel must be presented to manage traffic and pedestrian movements outside the facility. • Ensure that company's driver have the competence to operate the vehicles safely outside the facility. • Provide warning signs at all entrances and exits when carry out maintenance activities. • Provide sign for safe movement of vehicles and people (pedestrian crossing areas, barriers, safe zones, walkways etc.). • Introduce a speed limit to companies driver operate outside the facility. • Company's driver should follow all the traffic signs on the road • Driver operate companies vehicles outside the facility in any circumstances should under no alcohol influence • Provide emergency contact numbers in the vehicles and drivers should be made to aware of emergency contact number • First aid kit should be made available in the vehicles operating outside the facility • Driver should be trained to use first aid kit and have training certificate • Maximum supervision from facility manager on the activity	• Driver should follow traffic signs or/and police instruction to avoid causing traffic jam • After traffic accident or incident, driver should Suspend or Stop the vehicle to assess the accident or incident • Apply first aid to unserious injured victim • Evacuate the serious injured victim to nearest hospital or clinic or call emergency number for evacuation assistance • Maximum supervision from facility manager on the activity	• Let the police investigate the accident on incident • Compensate the victim if necessary • Emergency contact numbers must be made available in the companies vehicles • Company should toughen up the regulation or police control driver behaviour • Maximum supervision from the facility manager on the activity
• Vehicles movement (in and out of the facility)		Noise and vibration impact on the community	• Notify the surrounding community on the maintenance plan and noise impact of the maintenance activity • Carry out the maintenance activity during	• Suspend or stop the activity temporarily when there is complaint from the surrounding	• Let police investigate people who involve in confrontation • Investigate if there is

• Conduct Maintenance to underground storage tanks, fuel pipes, canopy, fences, wall, floor and supporting office			working hours only • Make sure that noise produce during the maintenance does not exceed the maximum standard • Recommend to use low noise and vibration equipment during maintenance activity • Maximum supervision from the facility manager on the activity	community • Resolve the complaint before resume the work • Contact the police if there is physical confrontation involved during the complaint • Maximum supervision from the facility manager on the activity	damage to community property cause by the vibration during maintenance activity • Compensate if vibration produce during the activity destroy community's property • Maximum supervision from the facility manager on the activity
• Conduct Maintenance to underground storage tanks, dispensers, fuel pipes, canopy, floor and supporting office • Conduct maintenance to electrical system		Risk of fire or explosion impact to community	• Apply prevention action mitigation measures from conduct maintenance to underground storage tanks, fuel pipes, dispensers and electrical system maintenance to prevent fire explosion that potential have impact on community surrounding	• Apply control and respond action mitigation measures from conduct maintenance to underground storage tanks, fuel pipes, dispensers and electrical system maintenance to prevent fire explosion that potential have impact on community surrounding	• Apply corrective action mitigation measures from conduct maintenance to underground storage tanks, fuel pipes, dispensers and electrical system maintenance to prevent fire explosion that potential have impact on community surrounding

• Maintenance activity to underground storage tanks • Maintenance activity to pipework • Maintenance activity to dispenser • Maintenance activity to wastewater treatment system	**Soil quality,** **Water quality (both groundwater and surface water)**	Soil, surface water and groundwater pollution due to fuels spill and leak	• Only allow competent Workers or contractor to clean petroleum sludge at the bottom of the storage tanks • Make sure that tanks are empty, fuel pipe are free of fuels, and dispensers are empty of fuels before carrying out maintenance • Any accidental spill or leakage of substances (e.g. oil and lubricants) has to be cleaned promptly using proper procedure and equipment and should be disposed of in designated location • Relevant authority should be notified when carrying out tanks cleaning activity • Maximum supervision from facility manager on the activity	• Promptly clean the accidental spill or leak from underground storage tanks, fuel pipes and dispenser using proper methods and dispose it in designate location • Maximum supervision from facility manager on the activity and pollution	• Notify environmental authority for any contamination • Provide basic clean up material • Remediation must be undertaken when contamination is detected • Maximum supervision from the facility on the activity
		Petroleum slugged from the underground storage tanks	• Only allow competent Workers or contractor to clean petroleum sludge at the bottom of the storage tanks • Petroleum sludge at the bottom of the storage tanks should be collected carefully and dispose at the proper or/and designated location • Oils the water treatment system should be removed and water should be drained before carrying out maintenance to water treatment system • Oil from water treatment should be disposed of at the proper or/and designated location • Maximum supervision from facility manager on the activity	• Promptly cleaning the petroleum sludge using proper cleaning method when it spill or leak • Maximum supervision from facility manager on the activity	• Notify environmental authority for any contamination • Provide basic clean up material • Remediation must be undertaken when contamination is detected • Maximum supervision from the facility on the activity
• Spill or leak during maintenance • Fire or explosion	**Ecology impact**	Impact of leak (or spill) and fire (or/and explosion Vegetation and animals	• Only allow competent Workers or contractor to clean petroleum sludge at the bottom of the storage tanks • Petroleum sludge at the bottom of the storage tanks should be collected carefully and dispose	• Promptly clean the accidental spill or leak from underground storage tanks, fuel pipes and dispenser using proper methods and	• Investigate the cause of leak (or spill) and fire (or/and explosion) • Notify environmental authority for any contamination

during maintenance			at the proper or/and designated location • Make sure that tanks are empty, fuel pipe are free of fuels, and dispensers are empty of fuels before carrying out maintenance • Any accidental spill or leakage of substances (e.g. oil and lubricants) has to be cleaned promptly using proper procedure and equipment and should be disposed of in designated location • Oils the water treatment system should be removed and water should be drained before carrying out maintenance to water treatment system • Prepare and provide fire fighting equipment during maintenance • Maximum supervision from facility manager on the activity	dispose it in designate location • Use fire extinguisher to put of fire or contact fire department for assistance when fire is out of control • Maximum supervision from facility manager on the activity and pollution	• Provide basic clean up material • Remediation must be undertaken when contamination is detected • Maximum supervision from the facility on the activity
• Fire and explosion, and Spill or leak during maintenance • Waste production and burning	**Economic and agricultural impact**	• Fire and explosion, and Spill or leak impact on economic activity (kiosks, market, shops and agriculture activities) • Wastes on agricultural land	• Only allow experience do perform the maintenance • Make sure storage tanks, fuel pipes and dispenser are free of fuel prior to perform maintenance • Prepare and provide firefighting equipment • Any accidental spill or leakage of substances (e.g. oil and lubricants) has to be cleaned promptly using proper procedure and equipment and should be disposed of in designated location • Wastes should not be burnt onsite • wastes should managed properly and disposed of at the designated location • Provided emergency contact number in the facility and make worker aware of it • Maximum supervision from facility manager	• Suspend or stop the activity temporarily • Use proper fire extinguisher to put out fire • Contact fire departments for assistance when fire is out control and start affecting kiosks or shops or market • spill or leakage of oil and lubricants should be cleaned should be disposed of at designated location	• Investigate that cause of fire or/and explosion, spill or leaks • Compensate the affected people if necessary • Remind the workers to manage and disposed the wastes of at the designated location • Maximum supervision from facility manager on the activity

			on the activity	• Contact fire department when spill or leak affecting agricultural land or other property • Clean the wastes and dispose it at designated location • Maximum supervision from facility manager on the activity	

DECOMMISIONING PHASE

Activities	Impacts	Parameter/ particular concerns	Preventive action	Control and responding action	Corrective action
• Vehicles movements (in and out of the facility) • Demolition of the facility • Use of heavy machinery • Wastes production and burning	Air quality	*Dust (particulate matter) and Flue gasses/ exhaust gasses impact on air quality*	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Build fence around the decommissioning site to contain dust • Any complaints received from neighbours must be reported to proponent and measures must be taken to limit dust • Reduce vehicles speed and movement in the demolition area • Regular maintenance for construction vehicles and equipment to avoid emission to the air • Turn off idling of vehicles and machineries' engines • Suspend or Stop using out of control emitter vehicles and heavy machineries • Establish speed limits to vehicles operate inside and outside the project area and the speed limit sign should be temporarily installed in the project to remind the drivers • Turn off the unnecessary idling engines of	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Reduce vehicles speed and movement in the demolition area • Proper maintenance of the vehicles and heavy machinery engine • Suspend or Stop using heavy flue gasses emitter vehicles and machineries • Clean and dispose the wastes of at the designated location • Maximum supervision from the facility manager on the activity	• Re planting trees or/and grass after the decommissioning activity • Conduct regular maintenance to flue gasses emitter vehicles and machineries • Remind the drivers to not drive over the established speed limit • Remind the workers to managed and dispose wastes at the designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the facility manager on the activity

			vehicles and machineries • Wastes should not be burnt in the facility, but managed properly and disposed of at designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the facility manager on the activity		
• Vehicles movements (in and out of the facility) • Use of heavy machinery • Demolition of the facility • Wastes production and burning	Occupational health and Safety (OHS)	*Dust (particulate matter) and Flue gasses/ exhaust gasses impact on workers*	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Introduce speed limit to vehicles entering and exiting the site • Regular maintenance for construction vehicles and equipment to avoid emission to the air • Establish speed limits to vehicles operate inside and outside the project area and the speed limit sign should be temporarily installed in the project to remind the drivers • Turn of the unnecessary idling engines of vehicles and machineries • Prepared and provide PPE to all Workers involve in decommissioning activity • Wastes should not be burnt onsite, but managed and disposed of at the designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from facility manager in the activity	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Provided PPE to all Workers involve in the decommissioning activity • inform drivers to reduce speed when entering and exiting the site • Proper maintenance of the heavy machinery engine and vehicles • Suspend or Stop using heavy flue gasses emitter vehicles and machineries • Maximum supervision from the project manager on the activity	• Provide PPE to all Workers involve in the decommissioning activity • Conduct regular maintenance to flue gasses emitter vehicles and machineries • Remind the drivers to drive not over the established speed limit • Remind workers to manage and dispose the wastes of at the designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the project manager on the activity
• Pipe and underground Storage Cleaning		*Volatile organic compounds (VOCs) impact on workers*	• Make sure that storage tanks are completely empty and free of VOCs before lifting it out from the retention basin • Make sure that fuel pipes are drained properly and free of VOCs before disconnecting it from underground tanks and dispensers and taking it out from its channel • Make sure that dispensers are free of VOCs before dismantle it • Provide PPE to all Workers involve in dismantle activity • Wear proper PPE	• Suspend or stop the work if VOCs is still present in the storage tanks, fuel pipes and dispensers • Wear proper PPE when VOCs is present • Maximum supervision from facility manager on the activity	• Instruct workers to wear PPE before start working • Maximum supervision from facility manager on the activity

			• Maximum supervision from the facility manager on the activity		
• Work in extreme heat non Suspend or Stop		*Worker exposure to extreme heat*	• Workers must adjust exposure until body is acclimated to the heat • Notify supervisor of any personal risk factors • Set up breaking schedule • Provide proper PPE to all workers involve in the activity • Wear proper PPE • Prepare water or any alternative liquid to keep workers hydrated • Prepare first aid kit in an accessible location • Only trained and competent people to perform first aid • Do not ignore possible symptoms of heat stress • Maximum supervision from facility manager on the activity	• Suspend or stop the work temporarily when there is workers suffer from heat • Rest if exhausted • Apply first aid to heat exhausted workers or suffer from un serious heat stress • Evacuate the workers if the workers suffer serious heat stress to nearest hospital or clinic or contact emergency number for evacuation assistance • Maximum supervision from the supervision from facility manager on the activity	• Instruct workers to break regularly • Instruct workers to wear proper PPE • Remind workers to stay hydrated • Let the workers recover completely before resume to work • Compensate if necessary • Maximum supervision on the activity and sick workers
• Vehicles movement • Working with heavy machinery • Work at height		*Risk injury related to accident (vehicles, heavy duty equipment working in height, etc.)*	• Only trained and competent people to perform the work • Only allow competent driver to operate the vehicles and heavy machineries • Introduce speed limit on site for vehicles leaving and entering • Hold frequent safety meeting • Recognize hazard and provide plan • Use proper PPE working at height • Workers must make sure that every time Workers are on roofs and scaffolding, fall-prevention countermeasures are in place. • Make sure to work in a team of team of two or more • Prevent falling objects • Prepare first aid kit and provide emergency contact numbers • Maximum supervision from the facility manager on the activity	• Suspend or stop the activity temporarily when there is traffic accident or incident or injured during the activity • Apply first aid to treat unserious injured workers • Evacuate serious injured workers to nearest hospital or clinic, or contact emergency number for evacuation assistance • Maximum supervision from the facility manager on the activity and on injured workers	• Remind workers to proper PPE before work • Remind driver on the speed limit in the facility • Compensate if necessary • Maximum supervision from the facility manager on injured workers
• Dismantle facility components		*Workers mechanical related works*	• Hiring people with related work experiences	• Suspend or stop the activity temporarily when there is traffic accident or	• Remind workers to proper PPE before work

		accident	• Workers must understand mechanical hazard • Prevent body to contacting hazardous moving parts • Ensure no objects can fall into moving parts • Provide proper PPE and workers must PPE before work • Maximum supervision from the facility manager on the activity	incident or injured during the activity • Apply first aid to treat unserious injured workers • Evacuate serious injured workers to nearest hospital or clinic, or contact emergency number for evacuation assistance • Maximum supervision from the facility manager on the activity	• Compensate if necessary • Maximum supervision from the facility manager on injured workers
		Work in Confined space	• Only trained and competent people to performs confined space work • Use Respiratory protective equipment during perform confined space work • Provided proper PPE and workers must wear the PPE before the activity • Make sure to work in a team of two or more • Maximum supervision from the project manager on the activity	• Suspend or stop the temporarily when accident or incident happen • Rescue the injured workers from the confined space • Apply first aid to treat non serious injury • Evacuate the serious injured workers to nearest hospital or clinic or contact emergency number for evacuation assistance • Maximum supervision from the project manager on the activity	• Remind workers to work in a team • Remind workers to wear proper PPE • Let the work recover completely before resume to work • Compensate the workers if necessary • Maximum supervision from the project manager on the activity
• Dismantle electrical power system • Leaking of fuel from vehicles during decommissioning		*Impact of fire in the facility on the workers*	• Disconnect all the electrical source prior to dismantle electrical power system • The work area must be fenced to prevent unauthorized access to working areas. • Avoid using leaking vehicles in facility • Only designated Workers, supervision and nominated personnel will be allowed in work areas. • Relevant signage must be placed in and around the proposed site, for purposes of awareness during decommissioning phase	• Suspend or stop the work temporarily when there is fire during the activity • Evacuate Workers to safe place • Apply first aid to unserious injured workers • Evacuate serious injured workers to nearest hospital or clinic, or	• Investigate the accident or incident • Remind workers to wear PPE • Let the workers recover completely before resume to work • Compensate the workers if necessary • Notify the relevant authority when there is

			• An emergency response plan must be available on site and contractor and its Workers must be familiar with the plan. • Smoking is not permitted on site. • PPE must be worn at all time by staffs • All Workers should be made aware of all emergency contact numbers • Proper fire extinguisher should provide near that activity • Maximum supervision from the facility manager on the activity	contact emergency number for evacuation assistance • Maximum supervision from facility manager on the activity	casualty • Maximum supervision from the facility manager on the activity
		Electrical accident	• Disconnect all the electrical source prior to dismantle electrical power system • Only allow competent workers to perform the activity • Provide PPE to workers and workers must wear the PPE before the activity • Make sure to work in a team of two or more • Maximum supervision from the facility manager on the activity	• Suspend or stop the work temporarily when there is accident or incident • Evacuate Workers to safe place • Apply first aid to unserious injured workers • Evacuate serious injured workers to nearest hospital or clinic, or contact emergency number for evacuation assistance • Maximum supervision from facility manager on the activity	• Investigate the accident or incident • Remind workers to wear PPF • Let the workers recover completely before resume to work • Compensate the workers if necessary • Notify the relevant authority when there is casualty • Maximum supervision from the facility manager on the activity
• Vehicles movement (in and out of the facility) • Use of heavy machinery • Demolition of the facility • Wastes production and burning	**Social impact (community health and safety)**	*Dust (particulate matter) and Flue gasses/ exhaust gasses impact on community*	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • Make sure that dusty floor in the facility is regularly cleaned to avoid accumulation of dust • Concrete mixture should be properly done to avoid cement powder from carrying by the wind, particularly during windy day • Suspend or Stop using out of control flue gasses vehicles, machineries and generator • Regular maintenance for vehicles and equipment to avoid gasses emission • Establish speed limits to vehicles operate inside and outside the project area and the speed limit sign should be temporarily	• Regular Water sprinkle in the dusty area to suppress dust from suspend in the air • When there is complaint from the surrounding community Suspend or stop the work temporarily • Resolve to complaint in a proper manner before resume the activity • Contact emergency number if there is physical confrontation	• Let the police investigate people who involve in physical confrontation • Conduct regular maintenance to flue gasses emitter vehicles and machineries • Remind the drivers to not drive over the established speed limit • Remind the workers to manage and dispose wastes of at the designated location • Proper wastes management sign should be displayed in

			installed in the project to remind the drivers • Turn of the unnecessary idling engines of vehicles and machineries • Regular maintenance for back-up generator • Wastes should not be burnt onsite, but managed and disposed of at the designated location • Proper wastes management sign should be displayed in the facility • Maximum supervision from the facility manager on the activity	involved during complaint • Suspend the work when during windy day • Suspend or Stop using out of control flue gas vehicles, machineries and generator • Proper maintenance to construction vehicles and equipment • Wastes should be cleaned and disposed of at the designated location • Maximum supervision from the facility manager on the activity	the facility • Maximum supervision from the project manager on the activity
• Vehicles movement (in and out of the facility) • Movement of outside the facility		*Traffic jam and traffic accident (general traffic outside the facility)*	• Clear markings to set apart vehicle and pedestrians routes; • Dedicated personnel must be presented to manage traffic and pedestrian movements outside the facility. • Ensure that company's drivers have the competence to operate the vehicles safely outside the facility. • Provide warning signs at all entrances and exits when carry out maintenance activities. • Provide sign for safe movement of vehicles and people (pedestrian crossing areas, barriers, safe zones, walkways etc.). • Introduce a speed limit to companies driver operate outside the facility. • Company's driver should follow all the traffic signs on the road • Driver operate companies vehicles outside the facility in any circumstances should under no alcohol influence • Provide emergency contact numbers in the vehicles and drivers should be made to aware of emergency contact number • First aid kit should be made available in the vehicles operating outside the facility • Driver should be trained to use first aid kit	• Driver should follow traffic signs or/and police instruction to avoid causing traffic jam • After traffic accident or incident, driver should Suspend or Stop the vehicle to assess the accident or incident • Apply first aid to unserious injured victim • Evacuate the serious injured victim to nearest hospital or clinic or call emergency number for evacuation assistance • Maximum supervision from facility manager on the activity	• Let the police investigate the accident or incident • Compensate the victim if necessary • Emergency contact numbers must be made available in the companies vehicles • Company should toughen up the regulation or police control driver behaviour • Maximum supervision from the facility manager on the activity

			and have training certificate • Maximum supervision from facility manager on the activity		
• Vehicles movement (in and out of the facility) • Demolition of the facility		*Noise impact and Vibration impact*	• Notify the community around the facility on the decommissioning plan and impact of the activity • demolition the facility should happens during working hours • Make sure that noise produce during demolition does not exceed the maximum standard • Recommend to use low noise and vibration equipment during maintenance activity • Maximum supervision from the facility manager on the activity	• Suspend or stop the activity temporarily when there is complaint from the community • Resolve the complaint before resume the work • Call emergency contact number if there is physical confrontation involve during the complaint • Maximum supervision from the facility manager on the activity	• Let police investigate people who involve in physical confrontation • Resolve any problems in a proper manner • Investigate if there is damage to community property cause by the vibration during maintenance activity • Compensate if vibration produce during the activity destroy community's property • Maximum supervision from the facility manager on the activity
• Leaking of fuel from vehicles during decommissioning • Mechanical works		*Fire impact on the community*	• Use the preventive action mitigation measures for fire impact in the facility on the Workers, fire impact to residents in the facility and impact of fire in the residents to facility in this section to prevent fire.	• Use the control and responding action mitigation measures for fire impact in the facility on the Workers, fire impact to residents in the facility and impact of fire in the residents to facility in this section as control and responding actions.	• Use the corrective action mitigation measures for fire impact in the facility on the Workers, fire impact to residents in the facility and impact of fire in the residents to facility in this section as corrective actions.
• Removing underground storage tanks • Removing pipework • Removing dispenser • Removing wastewater treatment system • Leaking of fuel or lubricant from heavy machinery	Soil quality, Water quality (both groundwater and surface water)	*Soil, Surface water and groundwater pollution due to fuels spill and leak*	• Ensure fuel has been removed from the UST. • Pipes and vents must be disconnected and removed before the tank is lifted. • The UST must be securely fastened before transportation via truck from the site. • Soil samples will be obtained from the base and sides of the UST excavation to verify that the site is un-impacted and does not pose a contamination risk to human or the environment. • Backfill material must be un-impacted. • Ensure that any contaminated soil is removed and properly disposed to prevent	• Clean the leak and spill properly • Remediate must be under taken when contaminated is detected • Make known to relevant authority regarding the contaminated sites • Maximum supervision from the facility manager on the activity	• Remediation must be undertaken when contamination is detected • Maximum supervision from the facility manager on the activity

			potential impacts on groundwater. • If any pollution/ contamination of water resources or soil is detected during the decommissioning of the tanks, relevant authorities should be informed • Any liquid waste produce during the decommissioning must be properly disposed at the designated location/facility. • Maximum supervision from the facility manager on the activity		
• Spill or leak • Fire or explosion	**Ecology impact**	*vegetation and/animals*	Rehabilitate the site by planting trees and grass if there is no more plan to use the site for other activity. It is important to work with relevant authorities do carry out rehabilitation		
Decommission of the facility	**Economic and agricultural impacts**	*Impact on employees*	• Let the employees know as early as possible • Allocate the employees to other facility if possible • Help them to find other jobs if possible		
Waste production and burning		*Waste production*	• Manage the wastes properly and dispose the wastes at the designated location • Wastes should not be burnt onsite • Sing should be displayed on site and where waste should accumulated and disposed of • Maximum supervision from the manager	• Clean the improper disposal of wastes and dispose at the designated location • Maximum supervision from manager	• Remind workers to manage and dispose the wastes of at the designated location • Maximum supervision from the manager

11. PUBLIC CONSULTATION AND INFORMATION DISCLOSURE

1. Public Consultation

According to **Minesterial Diploma No.47/2017,** in preparing drafts for SEIS and EMP, ANPM requested the proponent to complete the existing requirements, by holding public consultations with local residents, government institutions, local authorities, intellectuals and other relevant government agencies. , with the reason that in the preparation stage of the SEIS and EMP documents, it is very necessary for these activities so that the proponent can understand the situation and condition of the area from the surrounding community, of a development project or investment in certain areas, especially in the Metiaut area. The purpose of the public consultation held by the company is to hear, understand and accept suggestions, criticisms and constructive solutions, for the vision or business strategy plan prepared by the company so far.

That way, on February 25, 2021, the proponent made a plan to complete the requirements requested by ANPM to hold a public consultation forum, from the preparations made by the proponent for smooth running of the event, the first thing the proponent made was to coordinate between the proponents. with the local authority, and also with the ANPM to determine the day and date to realize the event. From the public consultations which took place from February 25, 2021, while during the event there were many questions, suggestions and constructive criticism submitted from the surrounding community, people's representatives or local authorities as well as explanations on environmental laws from ANPM. from the suggestions and criticisms submitted by the guests at the event, among others, as follows;

1. **Mr. Julio da Costa Xavier (Chefe Suco Metiaut);**

   On that occasion the head of the village of Metiaut, emphasized and reminded the director of the Carrier Fuel company, to be committed to the business, another thing he said was, the company must be honest in the required workforce recruitment system, establish cooperation between the company and local authorities , build good coordination between the two parties in order to avoid problems that can occur at any time.

2. **Mr. Agapito.C.R (Lia Nain Suco Metiaut);**

   From the suggestions, the first thing he conveyed was, he was very happy with the investment or business in the Metiaut area, the second thing he conveyed was, after recruiting the necessary workforce, it is recommended for the company to improve human resources for these employees so that can contribute to the company and the

workforce in the future, while the last thing he said was, the Carrier Fuel company is a local company that really understands the customs and traditions of the indigenous people of Timor Leste, from there he said that before carrying out construction until the construction phase, company operations must complete the requirements of the adat leader or lia nain metiaut for the smooth running of the business in the future.

3. **Mr. Antonio De O. Soares (Delegadu);**

   From the sentence conveyed by him in general terms, the company must build good coordination for several aldeia heads near the project area, the company must avoid the prevailing nepotism system, the last is to develop human resources from good work experience there is.

4. **Sra. Francisca Carlota Barreto (Chefe Juventude Feto);**

   Mrs. Francisca suggested that the company should preserve the environment, while for the equipment used, she emphasized that the company should use high-quality equipment in accordance with factory standards and required requirements. The last suggestion she gave was that the company should make a concrete and good design or management for the green space area for proposed area/project.

5. **Sr. Jose Figueredo from ANPM/Downstream Staff;**

   From that opportunity, representatives from government institutions/ANPM, namely; Mr. Jose, he explained in great detail the requirements or permits, especially in the downstream sector related to the Environmental Permit Proposal which was applied until a permit was issued for activities related to existing government institutions.

Public consultation is conducted by project owner and supported by Hersege Consultant with the objective to obtain constructive opinion or comments from affected community including negative and positive comments. The method of public consultation is door-to-door or face-to-face.

There are several respondents were interviewed on their concerns regarding the impacts due to the proposed project activity. Most of the correspondents are pleased with the presence of the fuel filling station and the job opportunity that might be created. However, they suggested constructing the proper fuel filling station, since they are concerned on the impact that may occur in the future such as fire and others accident and control the quality and price of the fuel.

1.a) Public Consultation by Face to Face

Figure 37. Public Consultations by Face to Face (*Source: Hersege Consultant 2020*)

1.b) Public Consultation by Forum

Figure 38. Public Consultations by Forum with Local Community, Local Authority and ANPM (*Source: Carrier Fuel and Hersege Consultant 2021*)

2. Information Disclosure

Disclosure of relevant environment safeguards documents will be in an appropriate form, manner, and language and at an accessible location to be understandable to the affected people and local stakeholders. The approved SEIS and EMP will be provided in the Proponent's office and can be accessed by project stakeholders' including affected communities within the project's area. The SEIS and EMP are considered as public document which is subjected to pass the information on the identified impacts and the proposed mitigation measures to be implemented.

12. DIFFICULTIES ENCOUNTERED

The following information indicates the difficulties encountered by Carrier Fuel team and Consultant team during site survey:

a. Lack of the availability of data regarding weather condition
b. Weather condition was not favorable to conduct the survey. As a consequent the survey was delayed for quite a while.
c. The availability of laboratory test in domestic use is considerably minim. Difficulty on disseminating the information through public consultation due to the fact that there should be in advance invitation taken place and convincing the cultural and community leader to be able to participate the public consultation.

13. CONCLUSION AND RECCOMENDATION

a. Conclusion

Based on the information above we can concluded that the construction of the fuel filling station project is a new additional business venture proposed by Carrier fuel to involve directly in the direct delivering the fuel to the consumers in Metiaut. The location of the project is located in Suco Metiaut. Analysis of the environmental impacts from the pre-construction phase, construction phase, operation phase, maintenance phase and decommissioning phase has suggested that there are potential impacts related to the Loss of Vegetation, air quality, contamination of the soil and groundwater body. Moreover, the important concern also related to the occupational health and safety such as exposure to the chemical and other hazardous material which should be properly managed and mitigate. The mitigation measures to the impacts have been proposed in the mitigation measures section**.**

b. Recommendation

There is several recommendations can be presented in relation with the project activities:

- The project owner to continue its construction and operation of fuel filling station compliance with all the legal framework of environmental policy and best practice of safeguard principle by implementing the proper mitigation measures according to the SEIS and EMP provided in this document
- The proponent continue to enhance the social corporate responsibility in reaching out the community in promoting the best practice of safeguard principle in order to reach a good balance between business and giving back to the community

- Authorities and project Proponent have to actively monitor the implementation of the EMP with the given proper indicator so that the propose EMP will be implemented
- The proponent has to read carefully the document so that all the propose EMP would be understood and implemented
- The proponent stated the seriousness in the resolving any environmental problem that may occur in relation to the project implementation.

14. NON-TECHNICAL SUMMARY

The aim of this Simplified Environmental Impact Statement (SEIS) is to examine the negative effects that this proponent undertaking is likely to have on both the physical ecological and socio economic environment.

Objectivo husi Declarasaun Impactu Ambiental Simplikada (DIAS) atu examina afeito negative ne'ebe proponente hala'o sei kona ba fisika ekologia no ambiente sociu ekonomiko.

The proposed project is an automotive fuel filling station, called Carrier Fuel which located at Carungulau, Suku Metiaut, Post Administrative of Cristo Rei, Dili and Timor-Leste.

Proposta projeitu mak hanesan fatin avastamentu kombustivel, bolu Carrier Fuel ne' ebé lokaliza iha Carungulau, Suku Metiaut, posto administrative Cristo Rei, Dili no Timor-Leste.

This environmental impacts assessment as a basis to prepare the report SEIS and EMP has been conducted by taking the reference from the legal framework of environmental safeguard policy, as well as the Timor Leste regulation of petroleum and mineral resources management.

Avaliasaun impaktu ambientál ida ne'e hanesan baze ida atu prepara relatóriu DIAS no PJA ne'ebe hala'o tiha ona husi referénsia husi rejime jurídiku kona-ba política ambientál salvaguarda, nune'e mós ba regulamentu Timor-Leste kona-ba jestaun rekursu petróleu no mineral.

Description of the existing environment including physical, ecological, socio-economic and cultural components are provided for the baseline environmental information.

Deskrisaun kona-ba ambiente hirak ne'ebé inklui fízika, komponente ecologika, sósiu-ekonómiku no kulturál sira fornese informasaun baze ambiental

Based on the preliminarily identification of feasibility study for the proposed location, there is no project alternative and the alternative locations are not the applicable alternatives to the project.

Bazeia ba identifikasaun preliminár estudu viabilidade ba fatin ne'ebé propoin, katak laiha alternativa projetu no fatin alternativu sira la alternativa ne'ebé bele aplika ba projetu

The description of climate change consist of historic weather, future projection under projected climate change, Implication for the Proposed Project and adaptation measures required to mitigate any potential adverse impacts

Deskrisaun kona-ba mudansa klimátika ne'ebé kompostu husi istóriku klimatika, projesaun futuru iha klima ne'ebé projeta muda, implikasaun ba Projetu ne'ebé Propoin no adaptasaun medida hirak ne'ebé presiza hodi halo mitigasaun ba impaktu ladiak potensiál ruma

Potential environmental impacts have been identified; proposed mitigation measures and monitoring responsibility during pre-construction, construction, operation, maintenance and decommissioning phase.

Identifika tiha ona potensiál ba impaktu ambientál; propoin medidas mitigasaun no monitorizasaun responsabilidade durante pré-construsaun, construsaun, Operasaun, manutensaun, ho dekomisaun prontamente prevee tiha ona

The Environmental Management Plan (EMP) involves risk management strategies that should be undertaken by the project proponent, project manager and the residents to mitigate environmental degeneration.

Planu Ambientál Jestaun (PJA) involve risku jestaun estratéjia ne'ebé sei hala'o husi proponente projetu, jerente projetu nian no ba komunidade hodi halo mitigasaun degenerasaun ambientál

Public consultation is conducted by project owner and supported by Hersege Consultant with the objective to obtain constructive opinion or comments from affected community including negative and positive comments. The method of public consultation is door-to-door or face-to-face and by forum as well.

Konsulta pública ne'ebé hala'o hosi projetu nain no apoiu hosi Konsultór Hersege ho objetivu atu hetan opiniaun ne'ebé konstrutivu ka komentáriu husi komunidade afetadu sira ne'ebé inklui komentáriu negativu no pozitivu. Metodu ba konsulta pública mak husi odamatan ba odamanatan ka oin ba oin nomos via forum.

The difficulties encountered by Carrier Fuel team and Consultant team during site survey: lack of availability of data, weather condition and the availability of laboratory test in domestic use is considerably minim

Difikuldade ne'ebé ekipa Carrier Fuel no Konsultór levantamentu durante survey: fatin ne'ebé propoin besik fatin santu, falta disponibilidade ba dadus, kondisaun tempu no disponibilidade teste laboratóriu utilizasaun doméstika mak konsidera minimu.

ANNEX I
COMPANY LEGAL DOCUMENT

SERVE, I.P.
Serviço de Registo e Verificação Empresarial Instituto Público

Autorização para Exercício de Atividade Económica

Authorization to Conduct Activity / Autorizasaun atu Hala'o Atividade / Persetujuan untuk Melakukan Kegiatan Usaha

(Alto Risco/High Risk/Risku A'as/Resiko Besar)

FIRMA:
REGISTERED NAME
NARAN KOMPAÑIA
NAMA PERUSAHAAN

COMPANY CARRIER FUEL, UNIPESSOAL, LDA

NÚMERO ÚNICO DA EMPRESA (NIF): **1158350**
ENTERPRISE UNIQUE NUMBER (TIN)
NÚMERU ÚNIKU KOMPAÑIA NIAN (NIF)
SATUAN NOMOR UNIK PERUSAHAAN (TIN)

SEDE PRINCIPAL EM:
MAIN OFFICE ADDRESS
SEDE PRINCIPAL IHA
ALAMAT KANTOR PUSAT

SUCURSAL: CARUNGU LAU, METIAUT, CRISTO REI, DILI, TIMOR LESTE

ATIVIDADE COMERCIAL AUTORIZADA:
COMMERCIAL ACTIVITY AUTHORIZED
ATIVIDADE KOMERSIÁL NE'EBÉ AUTORIZADA
KEGIATAN USAHA YANG DIIZINKAN

473 - RETAIL SALE OF AUTOMOTIVE FUEL IN SPECIALIZED STORES
473 - COMÉRCIO A RETALHO DE COMBUSTÍVEIS EM ESTABELECIMENTOS

DATA DE EMISSÃO: *ISSUED ON/LORON HASAI/ TANGGAL DIKELUARKAN* 20/10/ 2021

VÁLIDA ATÉ *(VALID UNTILL/LORON IKUS/ BERLAKU SAMPAI,* 20/10/ 2021

Cópia confere com o original

Autenticação do SERVE, I.P.
SERVE's Authentication
Autentikasaun SERVE, I.P.
Otentifikasi SERVE, I.P.

EMITIDA NOS TERMOS DO DECRETO-LEI N.34/2017
ISSUED IN ACCORDANCE WITH THE DECREE-LAW 34/2017
HASAI TUIR DEKRETU-LEI N. 34/2017.
DIKELUARKAN BERDASARKAN UNDANG-UNDANG NOMOR 34/2017.

0137070

REPÚBLICA DEMOCRÁTICA DE TIMOR-LESTE
MINISTÉRIO DE FINANÇAS
AUTORIDADE TRIBUTÁRIA

CERTIDÃO DE DÍVIDAS
CERTIFICATE OF DEBTS / SERTIDAUN DÍVIDAS / SERTIFIKAT DÍVIDAS

Número do Documento: 173782

O Comissário da Autoridade Tributária de Timor-Leste, certifico que
The Commissioner of the Tax Authority of Timor-Leste, certifies that
Komisáriu Diresaun Geral da Autoridade Tributaria Timor-Leste, seritfika katak
Komisaris Direktorat Jenderal Otoritas Pajak Timor-Leste dengan ini menyatakan bahwa wajib pajak di bawah ini

Nome do Contribuinte:
Taxpayer Name / Kontribuinte-nia Naran / *Nama Wajib Pajak:* COMPANY CARRIER FUEL, UNIPESSOAL LDA

NIF:
TIN: 1158350

Director:
Director / Direktor / *Direktur:* ADOLFO ANTONIO BELO

Sede:
Address / Enderesu / *Alamat:* COMORO, DOM ALEIXO, DILI

Data de Emissão:
Issued Date / Loron Hasai / *Tanggal:* 12/10/2020

Válido Até:
Valid Until / *To'o* Loron / *Sampai Dengan:* 10/01/2021

não tem dívida fiscal para o Estado da República Democrática de Timor-Leste:
has no tax debt owing to the State of the Democratic Republic of Timor-Leste:
la iha divida impostu ne'ebé deve hela ba Estadu Republika Demokratika Timor-Leste:
tidak memiliki utang pajak kepada Negara Republik Demokratik Timor-Leste:

Este certificado é emitido para todas as atividades comerciais, exceto para a extensão de Visto.
This certificate is issued for all commercial activities, except for Visa extension.
Sertifikadu ne'e emitidu ba atividades komersiais hotu-hotu, eksetu ba estensaun Viza.
Sertifikat ini dikeluarkan untuk semua kegiatan perdagangan, kecuali untuk perpanjangan Visa.

VERIFICADO POR
Sr / a : .....
Assinatura: .....
Data : ...../...../.....

Em Nome do Comissário Fiscal,
On Behalf of the Tax Commissioner,
Iha Komisáriu Fiskal-nia Naran,
Atas Nama Komisaris Pajak,

Maria Rangel Da Silva
Diretora Geral Autoridade Tributária

AUTORIDADE TRIBUTÁRIA
14.10.2020

Certificado de Registo Comercial

Business Registration Certificate / Sertifikadu Rejistu Komérsiu / Sertifikat Pendaftaran Usaha

Certifica-se para os devidos fins legais que a sociedade com a firma

For due purposes, it is hereby certified that the Enterprise named
Ba objetivu legais, tuirmai sertifika Katak emrepsa ne'e ho naran
Untuk tujuan legal, dengan ini menyatakan bahwa Perusahaan dengan nama di bawah ini

CARRIER FUEL

foi registada sob o Número Único da Empresa (TIN): 1158350
was registered under the Enterprise Unique Number (TIN):
rejistu ona ho númeru úniku Empresa (TIN):
terdaftar dengan Nomor Unik Perusahaan (TIN):

Anexa-se ao presente certificado o resumo do registo, extraído nos termos do Ato Constitutivo e Estatutos.
Attached to this certificate is the summary of the registration extracted in accordance with the Memorandum of Association and corresponding Articles of Association.
Aneksa ho sertifikadu ida-ne'e rezumu husi rejistu ne'ebe hasai tuir Aktu Konstitutivu no Estatuto sira.
Terlampir adalah ringkasan dari pendaftaran sesuai dengan Akta Perusahaan dan Anggaran Dasar terkait.

EMITIDO NOS TERMOS DO DECRETO-LEI N. 35/2012.
ISSUED IN ACCORDANCE WITH THE DECREE-LAW 35/2012.
HASAI TUIR DEKRETU LEI N.35/2012.
DIKELUARKAN BERDASARKAN UNDANG-UNDANG NO. 35/2012.

SERVE, I.P.
Serviço de Registo e Verificação Empresarial, Instituto Público
Cópia Conforme o Original
Florência da Conceição Sanches
Diretora

Data da emissão: 24/06/2013
Issued on
Loron Hasai
Tanggal Dikeluarkannya

REPÚBLICA DEMOCRÁTICA DE TIMOR LESTE
RDTL

Autenticação do SERVE
SERVE's Authentication
Autentikasaun SERVE
Otentifikasi SERVE
Data:
Rubrica:

0000445

SERVE, I.P.
Serviço de Registo e Verificação Empresarial, Instituto Público

Certidão do Registo Comercial

No. Processo 9979 /DIL

O Serviço de Registo e Verificação Empresarial Instituto Público– SERVE,I.P., certifica que a sociedade:
Serbisu ba Rejistu no Verifikasaun Emprezariál, Institutu Públiku – SERVE,I.P., sertifika katak sosiedade:
The Service for Registration and Verification of Entrepreneurs, Public Institution – SERVE,I.P., certifies that the company:

Firma: COMPANY CARRIER FUEL , Unipessoal, Lda.
Naran Kompañia/ Company's Name

Sede: 20 DE SETEMBRO, BEBONUC, DOM ALEIXO, DÍLI, TIMOR-LESTE
Sede/ Main Office

está legalmente registada desde 13 /Junho /2013 , **sob o Número Identificação Fiscal (NIF/TIN)** 1158350 .
rejista ona tuir lei hahu'u husi *Ioron,* *Fulan* *Tinan,* *ho Númeru Identifikasaun Fiskál nian,*
is legally registered since Date Month Year, under the Company's Unique Number.

Termos Estatutários: *Termus Estatutu nian/* In accordance with Articles of Association (AoA)

Capital Social: USD 5,000.00-
Kapitál Sosiál/ Share Capital

Objeto Social: *Objetu Sosiál/* Objectives

ESTÁ CONFORME O ARTIGO 3º DO ESTATUTO EM ANEXO**********
****

Sócio(s): Sósiu sira/Shareholders	NIF/NIF Individuál Personal TIN	I.D No.	Tipo I.D *Tipu/Type*	$-%/Quotas/Acões *Kuotas/Shares*
ADOLFO ANTÓNIO BELO	3228846	0141356	CElei	100%
**********				
**********				
**********				
**********				
**********				
**********				
**********				
**********				
**********				
**********				
**********				
**********				
**********				

Administração/ Conselho de Administração: *Administrasaun/Konsellu Administrasaun* / Administration/Administration Board	I.D. No.	Tipo *Tipu/* Type
ADOLFO ANTÓNIO BELO	0141356	CElei
**********		
**********		

Representante Legal: *Reprezentante Legál/* Legal Representative	I.D. No.	Tipo *Tipu/* Type
**********		

Fiscal Único / Conselho Fiscal: *Fiskál Úniku/ Konsellu Fiskál/* Single Fiscal/Fiscal Council	I.D. No.	Tipo *Tipu/* Type
**********		
**********		

Secretário(a): *Sekretáriu(a)/* Secretary	I.D. No.	Tipo *Tipu/* Type
**********		

Certificado do Registo Comercial emitido em Díli, 19 /Outubro /2020 , **nos termos do DL nº 16/2017 e Lei nº 10/2017.**
Sertifikadu Rejistu Komersiál hasai iha *Ioron* *fulan* *tinan* *, tuir Dekretu-Lei nº16/2017 no Lei nº 10/2017.*
Business Registration Certificate issued in Date Month Year , in accordance with Decree-Law 16/2017 and Law 10/2017.

Válido Até, 19 de Outubro de 2021
Válidu To'o
Valid Untill

Madalena Octavia Verdial de Araújo
Serviço de Processamento

SERVE, I.P.
Serviço de Registo e Verificação Empresarial, I.P.

SERVE, I.P.
Serviço de Registo e Verificação Empresarial, Instituto Público
Cópia conforme o original
Florêncio da Conceição Sanches
Diretor Executivo do SERVE, I.P.
Data: 20 OCT 2020
Rubrica:


REPÚBLICA DEMOCRÁTICA DE TIMOR LESTE
SECRETARIADO TÉCNICO DA ADMINISTRAÇÃO ELEITORAL
CARTÃO DE ELEITOR
UNIDADE GEOGRÁFICA DE RECENSEAMENTO
Distrito
BAUCAU
Subdistrito
BAUCAU
Suco
TIRILOLO
Aldeia
EPULALE
No Cartão
0141356
No De Inscrição
C.RDTL.258/2007/42
Nome / Naran
ADOLFO ANTÓNIO BELO
Data de Nascimento / Loron Moris
27/05/1969
Naturalidade / Moris Fatin
BAUCAU / BAUCAU / TIRILOLO
CONSERVE ESTE CARTÃO / RAI DIDIAK KARTAUN NE'E


CONSERVE ESTE CARTÃO / RAI DIDIAK KARTAUN NE'E
Eleisaun Parlamentar 2017
STAE
No: 120
CV:

COMPANY CARRIER FUEL, UNIPESSOAL LDA
Rua : Comoro Dom Aleixo, Dili
Mobile : +670 7728 5568 / +670 7339 2089
Email : Countryfuell@gmail.com

COMPANY PROFILE
COMPANY CARRIER FUEL, UNIPESSOAL LDA

Name of company: **Company Carrier Fuel, Unipessoal Lda**

1. Registered address:

Head Office	Address	: Comoro, Dom Aleixo Dili – Timor Leste
Company Carrier Fuel, Unipessoal Lda **(for correspondences)**	Director Address Telephone e-mail	: **Adolfo Antonio Belo** : Comoro, Dom Aleixo Benonuk Dili, Timor-Leste : +670 77285568 : countryfuell@gmail.com

2. Names and nationalities of principals/directors and associates

Director	Name	Nationality
Director	Adolfo Antonio Belo	Timor Leste

3. Type of company (natural person, partnership, corporation, etc.): **Unipessoal – LDA**

4. Description of company:

Company Carrier Fuel, Unipessoal Lda strong commitment to keep serving and supplying Timor-Leste, energy wise, We hereby extend our full guarantee and warranty for the goods offered for exclusively supply by us.

Company Carrier Fuel, Unipessoal Lda owns and operates fuel supply and distribution facilities as described below:

- Tank truck capacity: 10,000 Liters – 1 Unit Tank Truck
- Tank truck capacity: 5,000 Liters – 7 Unit Tank Truck

5. Company's nationality: **Timor-Leste**

6. Number of years' experience:

- Company Carrier Fuel, Unipessoal Lda: **5 Years**

7. Registration details:

1. Company Carrier Fuel, Unipessoal Lda registered in Timor-Leste in SERVE 13 June 2013 with the TIN 1158350;
2. Certidao De Dividas / Certification Of Debts with No. 173782

3. Authorization to Conduct Activities Economia Licenses – 473 – Retail sale of Automotive Fuel in Specialized stores
4. Authorization to Conduct Activities Economia Licenses – 473 – Comercio a Retalho de Combustiveis em Estabelecimentos

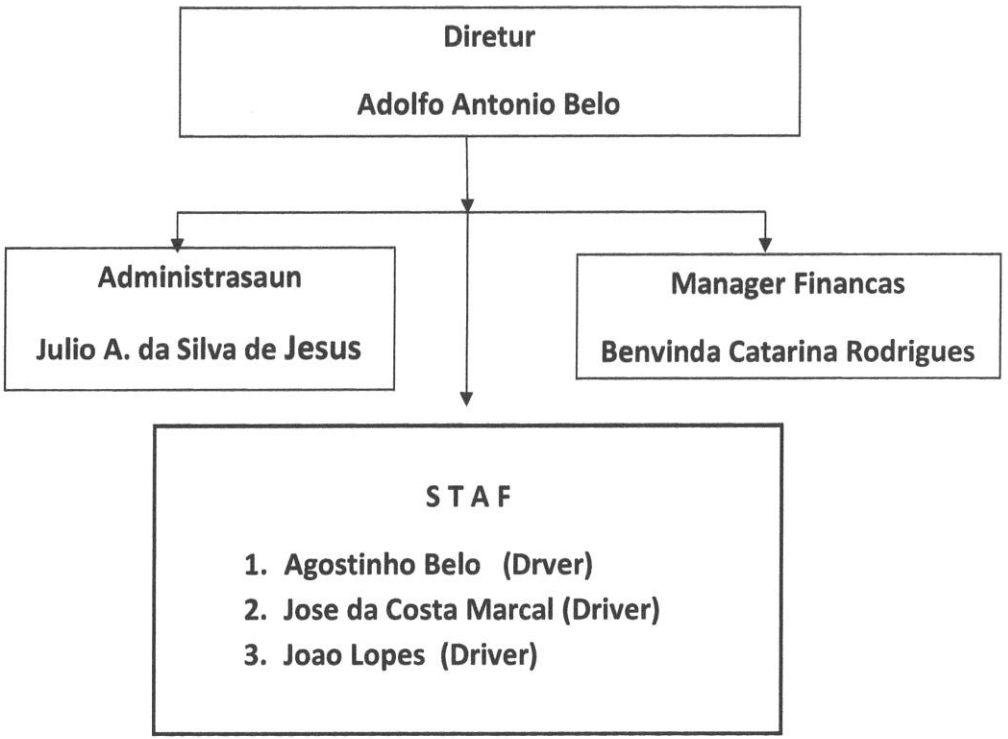
8. Equity in the company Shares (%)

Shareholders	Ordinary Shares	%
Company Carrier Fuel, Unipessoal Lda		100

9. Company Carrier Fuel, Unipessoal Lda is a national Timorese company established under Timor-Leste

COMPANY CARRIER FUEL, UNIPESSOAL LDA
Rua : Comoro Dom Aleixo, Dili
Mobile : +670 7728 5568 / +670 7339 2089
Email : Countryfuell@gmail.com

S T R U T U R A



Direção Downstream
Edifício do Ministério das Finanças, Pisos 6 e 7, Apartado 113, Aitarak Laran, Dili, Timor-Leste

Dili, 1 Setembru, 2020

ANPM/DS/S/20/910

Hato'o ba : **Sr. Antonio Adolfo Belo**
Diretor Kompañia Carrier Fuel Unipessoal, Lda
Rua Metiaut, Municipiu DILI

Kopia ba : **Sr. Florentino Soares Ferreira, Prezidenti ba ANPM**

Asuntu: Notifikasaun atu Kumpleta Rekezitus hodi Hetan Aprovasaun Fatin atu Hari'i Postu Abastesimentu Kombustível Foun

Ho Respeitu,

Liu hosi karta ne'e ANPM hato'o nia resposta ba karta ne'ebe ANPM simu hosi Kompañia **Carrier Fuel Unipessoal, Lda** iha loron 23 fulan marsu tinan 2020, kona-ba aplikasaun husu aprovasaun Fatin atu hari'i Postu Abastesimentu Kombustível foun iha **Rua Metiaut, Aldeia Carungu Lau, Suco Metiaut, Posto Administrativu Cristo Rei, Munisipiu Dilik**.

Hafoin halo avaliasaun ba dokumentu no terenu ne'ebe kompañia proposta, maka liu hosi karta notifikasaun ida ne'e, ANPM hakarak notifika ba Kompañia **Carrier Fuel Unipessoal, Lda, Sucursal,** katak fatin ne'ebe proposta kumpri ho rekezitus 1 km raiu. Hodi nune'e, ANPM notifika ba Kompañia **Carrier Fuel Unipessoal, Lda,** atu kumpleta dokumentu seluk atu bele hetan aprovasaun ba Fatin.

Lista Rekezitus ne'ebe presija atu kumpleta mak hanesan tuir mai:

1. Dokumentu ne'ebe justifika direitu ba Rai ka Rekomendasaun hosi Ministerio da Justiça liu hosi Diresaun Terras,Propriedades no Servisu Cadastrais
2. Dokumentu legal hosi SERVE hanesan Sertidaun no Sertifikadu Registu Kommersial, Lisensa ba Atividade Económika, Sertidaun Dívidas, Estatuto Kompañía ne'ebe komprova partisipasaun Ema Timor-Oan minimu 5% ka sosiu ho entidade orijen estranjeiru.
3. Kontratu entre Kompañia **Carrier Fuel Unipessoal, Lda,** ho Konsultor Ambiental inklui ho orariu implementasaun prosesu Lisensiamentu Ambiental.

Autoridade Nacional do Petróleo e Minerais

Bazeia ba Artigu 4.7 no 4.8 hosi Regulamentu kona-ba Alterasaun Daruak ba ANPM nia Regulamentu No. 1/2013 kona-ba Instalasaun no Operasaun Postu Abastesimentu Kombustível, Kompañia **Carrier Fuel Unipessoal, Lda,** iha tempu tinan ida (1) atu kumpleta rekezitus sira ne'ebe mensiona. Tempu tinan ida (1) hahu hosi **1 setembru 2020 to'o 31 Agostu 2021**. Regulamentu ne'ebe mensiona ANPM Aneksu.

Wainhira Kompañia **Carrier Fuel Unipessoal, Lda,** la kumpleta dokumentu sira refere tuir tempu ne'ebe determina, maka ANPM sei rejeita no sei la konsidera aplikasaun hosi Kompañia **Carrier Fuel Unipessoal, Lda**, atu hari'i Postu Abastesimentu Kombustível iha fatin refere.

Lahaluha, ANPM hakarak mos informa katak ANPM sei fasilita Kompañia **Carrier Fuel Unipessoal, Lda** ho emiti karta rekomendasaun ba iha SERVE atu hetan dokumentus legal. ANPM mos sei fasilita Kompañia **Carrier Fuel Unipessoal, Lda,** hodi emiti karta notifikasaun ba Diresaun Terras, Propriedades no Servisu Cadastrais, atu bele fo asistensia ba kompañia iha prosesu aplikasaun atu hetan karta rekomendasaun ba fatin ne'ebe proposta.

Mak ne'e deit karta notifikasaun hosi ANPM, sekarik Kompañia **Carrier Fuel Unipessoal, Lda,** iha duvidas ka perguntas ruma relasiona ho kontiudu karta refere bele vizita eskritoriu ANPM nian no bele mos komunika mai ANPM liu hosi numeru kontaktu +670 73099995 / 73099996 no karta elektroniku downstream.staff@anpm.tl durante oras serbisu.

Ba Ita-Bo'ot nia atensaun no ko'operasaun lahaluha ANPM hato'o obrigado wa'in.

Kumprimentus,

Nelson de Jesus
Diretor Diresaun Downstream

MINISTÉRIO DA
JUSTIÇA

SECRETARIA DE ESTADO DAS TERRAS E PROPRIEDADES

DIREÇÃO GERAL DAS TERRAS E PROPRIEDADES

DIREÇÃO NACIONAL DOS SERVIÇOS CADASTRAIS

Dili, 21 Outubro tinan 2020 No.Ref.401-242/DNSC/SETP/DGTP/X/2020

Para : Ex-mo Diretor Downstrem Autoridade Nacional do Petróleo e Minerais (ANPM) Sr. Nelson de Jesus

Endereso : Edifício do Ministério das Finanças, Pisos 6 e 7, Apartado 113 Aitarak – Laran, Dili Timor-Leste

Assuntu : Informasaun kona ba estatutu rai.

Bazeia ba carta ho No.Ref. ANPM/DS/S/20/1039 ,iha loron 24 fulan Setembro tinan 2020 atu facilita Gerente da Empressa Kompañia Carrier Fuel Unipessoal, Lda ho naran socio/Outorgante Adolfo Antonio Belo atu bele tuir prosesu lisenciamentu hodi kontinua hala'o atividade Postu Abasteimentu Kombustivel, ho nune'e DNSC hakarak informa bá ita bót, situasaun imóvel refere hanesan tuir mai ne'e :

1. Propriedade refere atualmente celebra ona Contrato Arrendamento, número 530.04182 ho Estado RDTL liu husi Ministério da Justiça, Direção Geral das Terras e Propriedades tuir Lei no. 1/2003, loron 10 fulan Março. Propriedade refere ho nia superficie **1.499 M²,** ne'ebé lokaliza iha Aldeia **Carangulau,** Suco **Metiaut**, Posto Administrativo **Cristo Rei**, Municipio **Dili.**

2. Propriedade refere iha Contrato Arrendamento ne'e so bele uza ba **fins Comercial** tuir artigo 2 Uso autorizado.

3. Gerente da Empressa Company Carrier Fuel, Unipessoal, Lda reprezenta Adolfo Antonio Belo presiza konsulta mós ho Instituisaun Governo nian seluk hanesan Direção Nacional do Comercio ne'ebé maka iha relasaun ho assuntu ida ne'e.

4. Bazeia ba razaun fundamental sira ne'ebé temi iha leten, DNSC hato'o Informasaun ne'e bá Autoridade Nacional do Petroléo e Minerais (ANPM) atu
bele hala'o prosesu lisensa hodi hari'i Posto Abastesimentu Combustível nian tuir plano urbano cidade Dili, nó Lei RDTL ne'ebé vigor.

Ba koordenasaun no kolobarasaun hato'o obrigado wain.

Diretor da DNSC

Paulino da Cruz, M.M
No.ID : 7073 - 9

23/10/2020

7706343 1

MINISTÉRIO DA JUSTIÇA
GABINETE DO MINISTRO

ARRENDAMENTO DE PROPRIEDADE DO ESTADO

CONTRATO Nº: 530.04182.

Celebra-se o presente contrato de arrendamento de propriedade do Estado entre,
O **ESTADO DE TIMOR - LESTE**, neste acto representado por S.E. o Ministro da Justiça, Dr. Manuel Cárceres da Costa, nos termos das atribuições e competências concedidas pelas disposições conjugadas da alínea d) do número 3 do artigo 3º, alínea d) do artigo 15º e número 1, al. m) do art. 19º, todos do Decreto-Lei n.º 14/2018, de 17 de Agosto, e número 6 do artigo 12º do Decreto-Lei nº 19/2004, de 17 de Dezembro, doravante denominado **SENHORIO**

e

A **Empressa "Company Carrier Fuel, Unipessoal, L.Da"**, Sociedade Comercial com sede em Rua Nicolau Lobato, Suco de Comoro, Posto Administrativo de Dom Aleixo, Município de Dili, com capital social de UD$ 5, 000, 00 (cinco mil dólares americanos), inscrito no Registo Comercial sob o número Único de Empresa 1158350, representado neste acto pelo Administrador, o Senhor Adolfo Antonio Belo, doravante denominado **ARRENDATÁRIO.**

Artigo 1º

Descrição da propriedade

1. A propriedade objecto de arrendamento do Estado consta do mapa em *Anexo I* ao presente contrato e dele faz parte.
2. A propriedade descrita no *Anexo I* tem as seguintes características:

a) **Número de identificação do terreno/Planta: -**	e) **Posto Administrativo: Cristo Rei, Município de Dili.**
b) **Localização: -**	f) **Tipo de Propriedade: Terreno.**
c) **Aldeia: Karangulau.**	g) **Superfície do terreno: 1. 499 m²** (um mil e quatrocentos e noventa e nove metros quadrados)
d) **Suco: Metiaut.**	h) **Superfície do edifício:** - m² (- metros quadrados)

Artigo 2º
Uso autorizado

1. A propriedade objecto do presente contrato somente pode ser usada para fins **Comercial.**
2. O **ARRENDATÁRIO** compromete-se a efectuar todas as melhorias necessárias ao uso contratual do imóvel, bem como a não ceder, subarrendar ou de qualquer forma conceder qualquer outro tipo de uso a qualquer outra pessoa ou entidade sem o prévio consentimento, por escrito, do **SENHORIO.**
3. O não cumprimento do disposto no número anterior é motivo de resolução imediata do contrato pelo **SENHORIO** e consequente despejo administrativo, nos termos da lei.

Rua da Justiça, Colmera – Dili, Timor-Leste
E-mail: manuel.carceres@mj.gov.tl
gabinete.mj.oitavogc@gmail.com
Web : www.mj.gov.tl

Artigo 3º
Duração

1. O presente contrato de arrendamento com vigência de 10 (dez) anos, tem início a 1 de Augost de 2020, e termina no dia 31 de Julho de 2029, automaticamente renovavel.

2. O presente contrato pode ser renovado mediante acordo expresso de ambas as partes.

Artigo 4º
Renda

1. O valor da renda mensal a ser pago pelo **ARRENDATÁRIO** é fixado em US$ 493, 50 (quatrocentos e noventa e três dólares americanos e cinquenta centavos).

2. O primeiro pagamento da renda mensal respeitará ao mês de Augosto de 2020.

3. O pagamento de cada renda deve ser feito mensalmente, em moeda oficial de Timor-Leste, devendo ser efectuado por transferência bancária ou depósito na conta bancária oficial dos serviços competentes do Ministério da Justiça, adiante designada: **Banco Nacional Ultramarino (BNU), Conta nº**: 28702410001, Attn: Direcção Nacional de Terras, Propriedades e Serviços Cadastrais, até ao 10º dia do mês seguinte a que respeita a renda.

4. No caso de alteração da conta bancária oficial acima referida, este facto será comunicado oficialmente à ARRENDATÁRIO, devendo esta acusar a boa recepção do ofício.

5. O valor referido no nº 1 fica sujeito às alterações introduzidas após entrada em vigor do Diploma que fixará as rendas, nos termos previstos no art. 11º do Decreto-Lei nº 19/2004, de 17 de Dezembro.

6. O valor da renda referido no nº 1 será revisto anualmente, de acordo com a legislação vigente e valores de mercado praticados nesse momento, mas nunca superior a 15% do valor pago no mês imediatamente anterior.

7. Para o efeito do disposto no número anterior, o Senhorio deve notificar a ARRENDATÁRIO com antecedência mínima de 30 (trinta) dias.

8. Em caso de incumprimento do prazo referido no nº 3, o **ARRENDATÁRIO** fica sujeita à penalização nos termos da lei vigente.

9. O não pagamento do montante devido, acrescido da penalização legal dá lugar a despejo administrativo, nos termos da lei.

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Artigo 5º
Cessação antecipada do Contrato

1. O **ARRENDATÁRIO** pode fazer cessar antecipadamente o contrato antes do seu prazo de caducidade, com notificação prévia mínima ao **SENHORIO** de 3 (três) meses.
2. O **SENHORIO** pode terminar o contrato a todo o tempo, em caso de incumprimento das obrigações contratuais pelo **ARRENDATÁRIO.**
3. Sem prejuízo do pagamento das rendas, o não uso do imóvel pelo **ARRENDATÁRIO** por um período superior a 1 (um) ano confere ao **SENHORIO** a faculdade de terminar antecipadamente o contrato, sem que seja devida qualquer compensação.
4. Com a cessação do contrato de arrendamento, a propriedade plena da parcela reverte para o Estado de Timor-Leste, através dos órgãos e serviços competentes, em bom estado de conservação, devendo a **ARRENDATÁRIO** indemnizar o **SENHORIO** pelos prejuízos causados.
5. As obras que o **ARRENDATÁRIO** venha a realizar na parcela no número anterior constituem património do **SENHORIO**, não podendo o **ARRENDATÁRIO** destruir o prédio urbano construído e nem alegar retenção ou pedir indemnização.

Artigo 6º
Notificações

1. As notificações, reivindicações, correspondências ou outros documentos relativos a este arrendamento devem ser redigidos em tétum ou português.
2. As notificações entre o **SENHORIO** e **ARRENDATÁRIO** devem ser feitas na pessoa dos seus legítimos representantes legais.

Artigo 7º
Licenciamento do projecto

1. O presente contrato de arrendamento não isenta o **ARRENDATÁRIO** de quaisquer obrigações legalmente exigidas para a construção, realização de actividades comerciais ou quaisquer outros actos que possam ser praticados no imóvel objecto do arrendamento.
2. O **ARRENDATÁRIO** não está autorizada a construir ou iniciar qualquer actividade no imóvel sem antes obter o licenciamento ambiental do projecto e outros licenciamentos ou autorizações exigidos por lei.

Artigo 8º
Seguro

1. O **SENHORIO** não é responsável por qualquer seguro relativo à propriedade.
2. O **ARRENDATÁRIO** poderá contratar e manter seguro para suas próprias finalidades durante a vigência deste contrato e de qualquer prorrogação do mesmo.

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Artigo 9º
Foro competente

As Partes acordam na competência exclusiva do Tribunal Distrital de Díli para a resolução de quaisquer litígios emergentes do presente contrato, acordando ainda na prévia tentativa de resolução amigável e em boa-fé dos mesmos.

O presente Contrato de Arrendamento é redigido em 4 (quatro) originais, na língua portuguesa e composto por 5 (cinco) páginas e um (1) Anexo, os quais serão devidamente assinados e rubricados por todas as partes.

Assinado em Díli, aos 25 dias do mês de Agosto de 2019.

Em Representação do SENHORIO,

Dr. Manuel Cárceres da Costa
Ministro da Justiça

Em Representação do ARRENDATÁRIO,

Adolfo Antonio Belo.
Gerente da Empressa "Company Carrier Fuel, Unipessoal, L.Da".

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ANNEX II
PUBLIC CONSULTATION

Hersege Lda, Mining and Environmental Consultant
Rua Taibessi, Alcrin, Lahane Oriental, Nain Feto, DILI, TIMOR LESTE
(+670) 77522363 / 76717048 / 76641553
hersegeconsultant10@gmail.com

PUBLIC CONSULTATION

No	Name	Address	Position	Comments	Phone Number	Signature
1	Maria Cecilia	Karahteu Lau, Suco Metiaut Cristo Rei Dili.		- Fo'o campo do trabalho - Labele rekruta joven hosi fatin seluk - Ami presiza kombustivel desde ami hiriha suco atu nune ami labele lao dook.		[signature]
2	Duarte Araujo Baptista		Seguransa civil	- Tenki halo konstrusaun ho qualidade - Fo'o prioridade ba komunidade bairro laran. - Proteje ambiental no ferreroa tasi labele halo inundasaun mina sai ba tasi.	77299140	[signature]
3	Francisco Gomes da Cruz.		Peskador	- Companhia tenki kria relasaun diak ho komunidade hodi bele hela mesik. - Ami bele halo servisu saida deit nanan maibe companhia tenki fo'o oportunidade ba ami bairo nian.		[signature]

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4	João Soares Bareto	Be'e karil		- Companhia labele halo fila kompanhia atu foo serbisu ba ema. - Mina tahi mos no kualidade - Sasan hirak hee tahi hira no kualidade		[signature]
5	Agapito Inacio da Costa.	Be'e karil		- Loke campo serbisu no foo prioridade ba komunidade baino laran. - Kapasita joven bairo laran hodi serbisu no diak. - Hamenus dezempregu iha aldeia nee		[signature]

Date: ...Dili 14 - 10........, .../........./2020

Approved By			
No	**Name**	**Position**	**Signature**
1	Adolfo Antonio Belo	Director	[signature]
Surveyor			
1	Herculano Lo. Lopes Guterres	Engineer	[signature]
2	Geocantio Alves	Engineer	[signature]
3	Patricio de Oliveira Ximenes	Engineer	[signature]
4	Sergio Martinos Saldanha	Engineer	[signature]
5			

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PUBLIC CONSULTATION

No	Name	Address	Position	Comments	Phone Number	Signature
1	Jacinta Pires	be'e-Karil (Karungulau		- Labele loron familia deit maka mai servisu iha nee - Funcionarios tenki ona no labele fakar soe mina ba rai, bee no tasi laran. - Mina folin tenki kontrola tuir mercado.		[signature]
2	Ana Gomes	be'e-Karil (Karungu-lau		- Ami sente kontente mina tanki besik no haju'up iha suco Metinaro - Bele fo'o servisu ba ami nia oan no alin sira.		[signature]
3	Anita Soares de Deus	be'e Karil (Karungu-lau)		- Ami apoio maibe sente tauk waihira mai han - Husu companhia tenki uza sasan kualidade tuir padraun. - Fo'o prioridade ba komunidade bairo laran atu servisu.		[signature]

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4	Sebastião da Silva		Dona da casa/pescadora	- Controla mina folin - Kualidade fonte [illegible] - Loke campo servisu no fo'o prioridade ba komunidade Bairro Lapan.		
5	Eliza Soares		Dona da casa/pescadora	- Sei autoridade local suporta ami nudar komunidade sempre apoio. - Importante mafa fo'o prioridade ba ami aldeia ne'e hodi servisu.		

Date: Dili . 14 - 10 ..../........./2020

Approved By			
No	Name	Position	Signature
1	Adolfo Antonio Belo	Director	
Surveyor			
1	Herculano do. Lopes. Guardaeiro	Engineer	
2	Geovanio Alves	Engineer	
3	Patricio de Oliveira Ximenes	Engineer	
4	Sergio Martires Saldinha	Engineer	
5			

LISTA PREZENSA

No	NARAN	POZISAUN SERVISU	HELA FATIN & NO CONTACTU	ASINATURA
1	Jose Figueredo	ANPM	73099995	
2	Jordão Sousa	ANPM	73099995	
3	Agapito da C. R.	Lia Nain	77619487	
4	Antonio De O. Soares	Delegadu	78045972	
5	Pedro da Silva Barreto	Chefe Aldeia	Meti-Aut, 78314175	
6.	Marcelino Gomes	Pescador	-/- 77298649	
7	Joana de Castro	Delegada	-//- 75539629	
8	Joanina da Silva Pires	Delegada	-//- 76694904	
9.	Luciana de Araujo	Chefe Aldeia	-//- 77372567	
10.	Francisca Carlota Barreto.	Chefe Suco Feto	Meti-aut 78623322	
11.	Angelo J. Soares	Joventude	Meti-aut 77618120	Angel
12	Victor Da Costa Freitas	ANPM	73099995	
13.	Hipolito Pereira Aragão	Delegadu	77252950	
14	Domingos da Costa Soares	Delegada		
15	João Soares Barreto	Pescador	77806126	
16	Antonio Ferreira	Xefe Joventude	77466194	
17.	Nevio Sarmento	Policia - OPS	78028082	

COMPANY CARRIER FUEL, UNIPESSOAL LDA
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Mobile : +670 7728 5568 / +670 7339 2689
Email : Countryfuel1@gmail.com

MINUTAS DE ENCONTRU

NARAN	PERGUNTA/SUJESTAUN	RESPOSTA/SOLUSAUN
Chefe Suku	Sujestaun Kompania wainhira mai tenki hatene atividade [illegible] lahulu loron mai liu no	
	tasila loorik.	
	Kuandu Kompania hakarak servisu ho kontratu, tenki halo formasaun, tenki liu	
	husi formasaun. Tenki respeita kultura. Halo komunikasaun ho lia nian	
Antonio Dro. Soares	Rekomendasaun barak tenki koordena ho autoridade lokal, para bele	
Francisco Carlos B.	[illegible] ambiental [illegible] realizadu [illegible]	
Arnaldo J. Soares	Joven agora desempregu ho investimentu husi kompania loro sae.	

Tenki loke liu kampu servisu [illegible], iha [illegible] formasaun iha Darwin (Australia) [illegible]

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Mobile : +670 7728 5568 / +670 7339 2689
Email : Countryfuel1@gmail.com

Dili, 25 de Fevereiru de 2021

COMPANHIA CARRIER FUEL UNIPESSOAL LDA

ADOLFO ANTONIO BELO

CHEFE DO SUCO METI AUT

JULIO DA COSTA XAVIER

CHEFE DE ALDEIA CARUNGULAU

PEDRO DA SILVA BARRETO

HERSEGE LDA

HERCULANO IVO L. GRANADEIRO

LISTA PREZENSA

No	NARAN	POZISAUN SERVISU	HELA FATIN & NO CONTACTU	ASINATURA
1	José Figueredo	ANPM	73099995	
2	Jordão Sousa	ANPM	73099995	
3	Agapito Da C.R	Lia Nain	77619487	
4	Antonio De O. Soares	Delegadu	78045972	
5	Pedro Da Silva Barreto	Chefe Aldeia	Metiaut/78314175	
6	Marcelino Gomes	Pescador	Metiaut/77298641	
7	Joana De Castro	Delegada	Metiaut/75539624	
8	Joanina Da Silva Pires	Delegada	Metiaut/76694904	
9	Luciana De Araujo	Chefe Aldeia	Metiaut/77372567	
10	Francisca Carlota Barreto	Chefe Juventude Feto	Metiaut/78623322	
11	Angelo J. Soares	Juventude	Metiaut/77618120	
12	Victor Da Costa Freitas	ANPM	73099995	
13	Hipolito Prreira Magno	Delegadu	77252950	
14	Domingas Da Costa Soares	Delegada	-	
15	João Soares Barreto	Pescador	77806126	
16	Antonio Ferreira	Chefe Juventude	77466194	
17	Nevio Sarmento	Policia-OPS	78028882	
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27				

COMPANY CARRIER FUEL, UNIPESSOAL LDA

Dili, 25 de Fevereiru de 2021

COMPANHIA CARRIER FUEL UNIPESSOAL LDA, HERSEGE LDA,

ADOLFO ANTONIO BELO HERCULANO IVO LOPES GRANADEIRO

MINUTAS DE ENCONTRU

NARAN	PERGUNTA/SUJESTAUN	RESPOSTA/SOLUSAUN
Sr. Julio Da Costa Xavier **Chefe Do Suco Metiaut**	Sujestaun ba Proponente/Companhia Carrier Fuel atu hatudo atitude diak ne'ebe bele eduka, no hakribi atitude nepotismo/kkn, no ikus liu saida maka companhia esklarese iha sorumutu ne'e mantem komitmentu, promesa hirak ne'e no labele bosok tuir saida maka companhia hato'o ona ba ami hotu, liu-liu ba komunidade sira.	Resposta husi Adolfo A. Belo katak, uluk nanain hato'o obrigado uain ba Nai Suco Metiaut, ne'ebe que durante ne'e fo'o hanoin diak, fahe ideias, no fo'o ona tempo no fatin ba companhia Carrier Fuel hodi bele mai halo aprezentasaun ba proposta do projetu ne'e, no fo'o ona esperansa mai companhia hodi bele atinji ninia hakarak liu husi sorumutu ida ne'e. Senhor Adolfo mos akresenta liu tan katak, sei hakruk ba Lei ne'ebe vigora, no tau respeito tomak ba Suco no Estrutura Suco Metiaut hotu, kria relasaun familiar ne'ebe diak entre parte rua ne'e inklui mos ho komunidade suco metiaut tomak.
Sr. Agapito da C.R **Lia Nain iha Suco Metiaut**	1. Hanesan Lia Nain no komunidade Metiaut, sente Contente ho prezensa Companhia Carrier ne'ebe que iha Inisiativu hodi investe iha Area Metiaut. 2. Ami husu Companhia tenki fo'o formasaun no kapasita ba Rekurso Humano ne'ebe companhia Necesita. 3. Respeita Fatin Cultural/Fatin Lulik hirak ne'ebe Ejiste nanis ona ne'ebe hatu'ur besik iha Area Projetu, no sujere ba companhia atu koordena ho Lia Nain sira hodi haketak no halo tuir tiha lulik ou nain ba fatin ne'ebe besik atu labele resulta fali situasaun ida ne'ebe que ita hotu lakoi atu akontese iha future.	1. Senhor Adolfo hatan ba Sujestaun ne'ebe mai husi Sr Agapito nudar lia nain iha suco metiaut ninian, hanesan investor Timor oan hau sente orgulho no agradese tebes tamba hetan apoio maximu husi Autoridade Lokal no komunidade hotu husi Suco Metiaut ne'e. 2. Companhia Carrier Fuel komitmentu bo'ot hodi fo'o/recomenda rekurso ne'ebe companhia rekruta, hodi bele ba ganha experensia, tuir formasaun ne'ebe adekuade no servisu tuir padraun ne'ebe companhia Carrier haktuir hela ba rekerimentus husi Autoridade Nasional do Petroleo e Minerais. 3. Senhor Adolfo Akresenta liu tan katak, nudar Timor Oan ne'ebe que husi avo sira hatun mai, respeita fatin sagrado/lulik ninian, no companhia pronto kolabora ho lia nain suco metiaut ninian hodi bele halo tuir no husu licensa tuir kustumi timor ninian.

COMPANY CARRIER FUEL, UNIPESSOAL LDA

Sr. Antonio De O. Soares **Delegadu**	Sujere ba Companhia Carrier Fuel katak, iha faze rekrutamentu companhia tenki ser koordena ho Autoridade/Chefe de Aldeia iha Aldeia tolu iha Suco Metiaut ne'e tuir pontus hirak ne'e 1. Halo Selesaun ba Documentos tuir Nivel Academiku ninian. 2. Halo Selesaun Meritu no labele hili deit tuir Companhia ninia hakarak/nepotismo 3. Recomenda rekurso ne'ebe que liu ona selesaun atu bele hetan treinamentu no tuir formasaun ne'ebe adekuadu.	1. Senhor Adolfo hatan ba sujestaun iha ponto dahuluk husi senhor Antonio D.O.Soares ninian, sim companhia iha dever tomak hodi bele halo selesaun ba docume tos hirak ne'ebe sei submete husi aplikantes sira. 2. Selesaun por meritu no hakribi nepotismu/kkn iha faze selesaun ninia laran 3. Liu tiha husi selesaun hirak ne'e companhia iha plano ona atu recomenda rekurso ne'ebe iha hodi bele ba tuir formasaun ou treinamentu.
Sra. Francisca Carlota Barreto **Chefe Juventude Feto**	1. Companhia iha dever tomak hodi bele konserva no cuidado ambiente ba fatin ne'e ho digno, uza sasan ne'ebe iha kualidade a'as no tuir standarizasaun fabrica. 2. Sujere ba companhia katak, jere espasu rai mamuk ne'ebe sei iha hodi kuda netik ai horis ba atu nune'e bele fo'o impaktu positivu ba ambiente ninia parte.	1. Hatan ba sujestaun ne'ebe iha, senhor Adolfo hateten katak, rekezitus hirak ne'ebe hatu'ur ona iha Lei Licensa Ambiental ninian, companhia prontu haktuir bazeia documentos/proposta Ambiental ne'ebe prepara husi Tekniku no hetan Aprovasaun husi Autoridade Nasional do Petroleo e Minerais. 2. Senhor Adolfo hateten katak, projetu ne'ebe sei realiza haktuir ba aprovasaun dezenho tekniku ne'ebe iha ona.
Angelo J. Soares **Juventude Intelektuais**	1. Hateten katak, nudar joven foin sae ida sente kontente no orgulho ba Carrier Fuel nudar Investor Lokal ne'ebe iha inisiativa diak hodi bele investe no dezemvolve suco Metiaut liu husi Negosio/estabelese posto combustivel ida iha area ne'e. 2. Companhia tenki hare liu ba Saude Seguransa Servisu ninian, atu nune'e bele hamenus risku, hado'ok a'an husi dezastre saida deit. 3. Senhor Angelo akresenta liu tan katak, husi esperensia ne'ebe Senhor ne'e ganha ona atraves de treinamentu, Estagio ih ANPM iha Tinan 2018, tuir formasaun iha Darwin (Australia), no hatene klean tebes sobre prosesu hirak ne'ebe iha relasaun ho Ambiental, no Rekerimentus hirak ne'ebe husi Autoridade Necesita.	1. Senhor Adolfo sente kontente tamba hetan apoio maximu husi Autoridade local, komunidade sira, liu-liu husi joven intelektuais sira. 2. Senhor Adolfo hateten katak, sim companhia sei tau importansia ba preparasaun rekurso humano ne'ebe iha, companhia mos sei husu tulun ba tekniku no Autoridade Nasional do Petroleo e Minerais hodi fo'o apoio tuir padraun ne'ebe sei hatu'ur iha documentos Ambiental ne'ebe que husi compahia Carrier sei prepara. 3. Senhor Adolfo husu apoio ba Joven intelektuais sira iha suco metiaut ne'e atu acompanha no fo'o nafatin sujestaun no ideias ne'ebe konstrutivu ba companhia hodi bele estabelese servisu ida diak no digno ba komunidade suco metiaut nomos ba nasaun RDTL.

COMPANY CARRIER FUEL, UNIPESSOAL LDA

José Figueredo **ANPM/Downstream**	Fo'o Esplikasaun badak konaba Kriterias bazikas hodi trata Licensa Ambiental, Prosesu Levantamentu Dadus husi Companhia, aprovasaun ba proposta projetu husi ANPM ba proponente, no haklean liu tan ba parte Monotorizasaun ba Projetu hotu ne'ebe que iha Autoridade Nasional do Petroleo e Minerais ninia kompetensia.	Husi Parte hotu hato'o obrigado uain ba prezensa husi parte Autoridade Nasional do Petroleo e Minerais ninian, no sente iha esperansa bo'ot tamba husi aktividades projetus hotu husi parte Governo ninian sempre acompanha no tau matan ba aktividades hirak ne'ebe fo'o impaktu ba Ambiental.

Dili, 25 de Fevereiru de 2021

COMPANHIA CARRIER FUEL UNIPESSOAL LDA — CHEFE DO SUCO METIAUT

ADOLFO ANTONIO BELO — JULIO DA COSTA XAVIER

CHEFE DE ALDEIA CARUNGULAU — HERSEGE LDA

PEDRO DA SILVA BARRETO — HERCULANO IVO. L. GRANADEIRO

ANNEX II
BASELINE INFORMATION

Hersege Lda, Mining and Environmental Consultant
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hersegeconsultant10@gmail.com

ENVIRONMENTAL ASSESSMENT CHECKLIST

1. Project Description

Project Tittle	FUEL FILLING STATION.
Proponent	CAHLIEF FUEL UNIPESSOAL LDA.
Address	ALDEIA KARANGULAN, SUCO METIAUT, CRISTO REI, DILI
Person in Charge	ADOLFO ANTONIO REGO.
Phone Number	78392089

2. Project Information

Project Location		ALDEIA KARANGULAN, SUCO METIAUT
Coordinate		8°32'24", 125°36'47"
Area of Proposed Land		1.409 m².
Brief Description		GOVERNMENT LAND.
Source of Water		WELL WATER
Who owns the Proposed Land		GOVERNMENT
Present Land Use		NEW FUEL FILLING STATION.
Are there any squatter settlement in the proposed land		
Are there any trees in the proposed land		SUKAER, AIDAK, AI CAFE
Boundary of the project Land	North:	ELIZEU SOARES P. AMARAL.
	South:	Sr. JOAQUIM FONSECA
	East	Sr. JAIME MONIZ
	West:	Sr. RODOLFO REGIS

3. Screening

Is proposed project located in an ecological sensitive area?	Yes	✓	No	☐

4. Environmental Profile

Describe the terrain of the project Area	Flat or Level (Slope < 3%) ✓	Level to the moderately Steep (Slope 3% - 30 %) ☐	Moderately steep to mountainous (Slope <30%) ☐

Are there any sign of potential natural disaster within 500 meters?	Yes ☐	No ✓	If Yes Please Describe, (Where & Nature) BE'E SAE ITA TEMPO UDAN BOOT MAIBE LA AFEITA BA KOMUNIDADE NIA UMA, BE'E TUUN BA TASI.

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Is there any surface water body within 1,000 meters of the proposed site?	Yes ☑	No ☐

If Yes, Describe each water body

Name (include type i.e river, Canal/Stream)	Dimension	Status and Uses (is it polluted? Is it Domestic/wastewater discharge to it? What is its uses agriculture, domestic, industry, washing, fishing?
RIVER JOSE [illegible]	WIDE 10-15 METER	NATURE
SMALL RIVER AT EAST PART	WIDE 8 - 10 METER	NATURE
SMALL RIVER AT WEST PART	WIDE 8-10 METER	NATURE.

Is there any ground water well on the proposed site or within 500 m?	Yes ☑	No ☐

Yes, describe each well

Type (Dug well, tube well or hand pump)	Location (Coordinate, Village)	Depth and yield	Uses (Drinking, Agriculture, domestic, industrial, washing, livestock)
DUG WELL	KAMAHGULAU 8°32'25" 125°36'49"	DEPTH 34 METER	WASHING. LIVESTOCK.
TUBE WELL	KAMAHGULAU		WASHING, LIVESTOCK.

Based on the interview on the surrounding community, is any form of wildlife found on , or around the proposed site of the project	Yes ☑	No ☐	If Yes, Please describe - PUSSO FAIT - KAFOAK - [illegible] - KUKAI - MATAK LIN

Are there any existing trees or vegetation on proposed site of the project	Yes ☑	No ☐	If yes, how many and types of trees or vegetation? - SUKAEF - AMATE FAIT - AILOK - OLUT - AI CAFE - JAMBU - AIFUNAN TOMAK

Are there any reserved forests or protected area within 1,000 m of the proposed project?	Yes ☑	No ☐	If yes, please describe? - MATAG ROVE - AI NA. - AI BABAR - AI TEKA

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What is the present land use of the vicinity within 500 meters of the proposed site?					
	Residential	Commercial (shop, Fuel Station)	Open Land (Park, Farmland, Unutilized plot, barren land	Industrial	Government Institution
Description	EX-PRESIDENT S.E. JOSE RAMOS HORTA (RESIDENCE) PRIME MINISTER S.E. TAUR MATAN RUAK.	- SHOP - WORKSHOP - FISH SHOP - BARBEQUE SPACE - GENERAL - HOTEL	- AREIA BRANCA - CRISTO REI - DOLOK OAN - PARQUE BIDAU SANTANA - PANTAI BANKEIRA		

For any agriculture farmland on the proposed site or within radius of 500 meter around it?	
Main Corps	Source of Irrigation
- TODOS KUDA BATAR - AIFARINA - KUDA LAKERU - AIFUAN	- TEMPO UDAN - BEE ANASKA - UZA HO HEIN UTILIZA HUSI BEE DALAN

Please describe all sensitive receptors within 1,000 meter within proposed site of the project				
Type (School, College, Hospital, Clinic	Name	Size (Number of Student and Teacher, Number of Beds, Nurse, Doctor)	Location (Coordinate and Village)	Distance from site
SCHOOL	SD. METIAUT	300 STUDENTS AND		1.5 KM.
		15 TEACHERS.		

Roughly how many houses within 500 meters of the proposed site of the project?	± 300 HOUSES

What is the main source of income of the surrounding community	- AGRICULTURE 30 % - FISHERMAN 50 % - PUBLIC SCHOOL 20 %

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Is there any cultural importance within 1000 meter of the proposed site of the project?	Yes	No
	☑	☐

If Yes, Please Describe

Type (graveyard, Lulic House or Area, Archeological, Church)	Name	Description
CHURCH	STA MARGARIDA MARIA ALACOCE	- SELEBRA MISA IHA LORON DOMINGO NO LORON BOOT, NATAL PASCOA, LORON MATEBIAN.
CACUCAN	FOHO LULIK CACUCAN (±) 4 KM.	- SAU BATAR - HUSU UDAN BEIN.
BIROBU	FOHO LULIK BIROBU (±) 4 KM.	- SAU BATAR - HUSU UDAN BEIN.

What are the main pollution existing within a radius of 500 meters of the proposed site			
Name of the source	Type of Pollution (Noise, Air, Water)	Location (Coordinate and Village)	Distance from the site
SEDIMENTATION OF	WATER, AIR.		± 20 METER
THE RIVER			
RESIDENCE OF MR. MATA. NOISE DURING CONSTRUCTION			± 500 METER

Local Geology Information within or around proposed site	
Soil Information within or around proposed site	

Number of Population within the Village (Sucu)	Total
	Male
	Female
Number of Employment	
Number of Unemployment	
Birth Rate	
Mortality Rate	
Common Disease	

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INITIAL MEASUREMENT

Coordinate	8°32'24" R5°36'47"	Time	12:30
Date	14-10-2020	Temperature	34°c
Humidity	64% RH	Wind Speed	2-3 m/s
PM 2.5	12 ug/m3	Wind Direction	North-East South
PM 10	16.2 ug/m3	CO_2	0
NOx	0	CO	0
O_3	0	SOx	0
pH Soil	7.0	Temperature Soil	32°C
Soil Moisture	DRY	Water Temperature	30°c
Water TDS	6.3 ppm	pH Water	6.30

Noise Measurement

No	dBA	No	dBA	No	dBA	No	dBA
1	33.5	31	49.1	61	58.6	91	53.8
2	29.1	32	43.0	62	64.0	92	42.1
3	54.8	33	37.0	63	52.3	93	44.4
4	42.8	34	43.2	64	61.3	94	38.6
5	36.1	35	50.3	65	57.1	95	38.7
6	36.5	36	62.7	66	54.6	96	38.9
7	37.7	37	47.7	67	60.6	97	49.2
8	49.0	38	53.6	68	50.8	98	50.6
9	60.6	39	50.2	69	42.1	99	44.4
10	39.7	40	55.2	70	55.6	100	50.7
11	46.0	41	41.2	71	46.3	101	57.0
12	37.2	42	56.2	72	41.6	102	39.1
13	37.0	43	50.1	73	58.6	103	36.7
14	39.1	44	60.8	74	60.8	104	37.3
15	50.1	45	41.3	75	60.2	105	36.2
16	58.2	46	36.2	76	40.2	106	39.6
17	48.1	47	37.0	77	41.0	107	47.1
18	45.5	48	43.5	78	37.0	108	57.8
19	45.7	49	52.7	79	39.9	109	41.6
20	56.7	50	55.9	80	35.5	110	37.0
21	37.7	51	54.1	81	36.6	111	41.1
22	50.6	52	52.5	82	39.6	112	34.6
23	33.2	53	53.3	83	34.0	113	32.9
24	32.8	54	57.1	84	47.3	114	32.5
25	36.6	55	48.1	85	57.3	115	30.2
26	33.3	56	55.6	86	56.2	116	31.7
27	37.7	57	48.7	87	50.7	117	34.5
28	44.5	58	53.2	88	55.4	118	32.9
29	46.8	59	62.6	89	50.7	119	31.9
30	52.5	60	60.5	90	54.2	120	33.5

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INITIAL MEASUREMENT

Coordinate	8°32'24" 125°36'48"	Time:	10:30.
Date	14-10-2020	Temperature:	34°C
Humidity	63% RH	Wind Speed :	2-3 m/s
PM 2.5	12 ug/m3	Wind Direction:	NORTH TO SOUTH
PM 10	15.8 ug/m3	CO_2 :	0
NOx	0	CO :	0
O_3	0	SOx :	0
pH Soil	7.0	Temperature Soil:	31°C
Soil Moisture	DRY	Water Temperature:	31.2°C
Water TDS	19.1	pH Water:	22.2
Noise Measurement			

No	dBA	No	dBA	No	dBA	No	dBA
1	31.1	31	45.5	61	41.2	91	47.1
2	35.7	32	43.6	62	41.1	92	40.1
3	44.5	33	38.6	63	47.2	93	41.1
4	41.6	34	57.0	64	32.6	94	37.9
5	40.0	35	32.2	65	37.5	95	43.9
6	68.1	36	42.2	66	43.4	96	42.9
7	50.1	37	48.1	67	40.0	97	37.2
8	35.7	38	47.1	68	31.7	98	47.8
9	42.2	39	46.9	69	37.4	99	41.3
10	41.1	40	42.0	70	49.9	100	50.2
11	40.4	41	35.2	71	45.4	101	47.3
12	37.7	42	34.2	72	43.2	102	34.1
13	36.2	43	28.2	73	42.7	103	33.3
14	41.1	44	37.1	74	38.7	104	38.5
15	34.2	45	46.0	75	50.3	105	42.5
16	32.9	46	57.8	76	40.1	106	49.8
17	35.5	47	39.2	77	34.6	107	36.2
18	50.9	48	36.3	78	33.0	108	38.6
19	51.8	49	36.7	79	43.2	109	42.0
20	36.0	50	40.2	80	31.5	110	41.5
21	35.2	51	39.2	81	38.1	111	45.1
22	38.1	52	37.5	82	32.6	112	51.9
23	45.0	53	41.7	83	36.5	113	48.7
24	50.6	54	43.2	84	43.1	114	37.9
25	36.4	55	34.7	85	45.1	115	41.1
26	46.2	56	38.2	86	41.0	116	42.6
27	42.6	57	48.6	87	35.9	117	44.2
28	39.0	58	36.5	88	46.1	118	34.3
29	38.1	59	39.5	89	45.9	119	32.7
30	40.3	60	46.1	90	44.5	120	35.7.