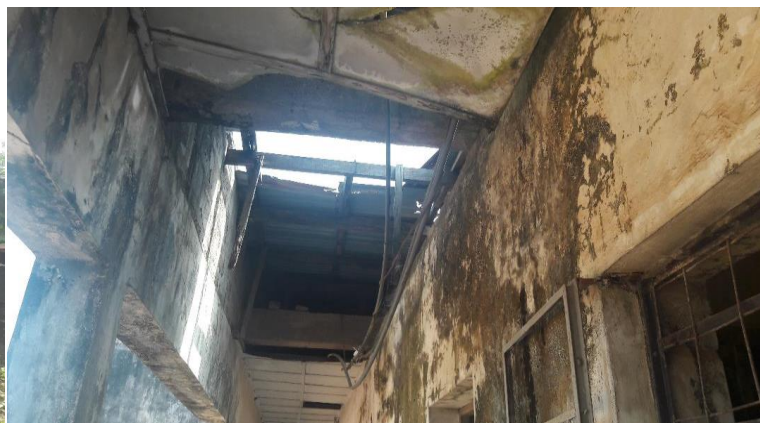


OGUN STATE ECONOMIC TRANSFORMATION PROJECT (OGSTEP)

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLANS (ESMPs) FOR REHABILITATION OF SIX TECHNICAL COLLEGES AT OGUN STATE

Government Science and Technical Colleges at
Ijebu-Ode, Ayetoro, Ajegunle, Igbesa, Ilara Remo and Idi-Aba



FINAL REPORT

MARCH 2019

ABBREVIATIONS

ACHPR	The African Charter on Human and Peoples' Rights
ACRWC	The African Charter on the Rights and Welfare of the Child
CBO	Community Based Organisation
CEDAW	The Convention on the Elimination of All Forms of Discrimination against Women
CRC	The Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
DLIs	Disbursement Linked Indicators
EA	Environmental Assessment
EE	Eligible Expenditures
EIA/ESIAs	Environmental and Social Impact Assessments
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESO	Environmental Safeguards Officer
FEPA	Federal Environmental Protection Agency
FMENV	Federal Ministry of Environment
GBV	Gender Based Violence
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
HSE	Health Safety and Environment
MDAs	Ministry Department Agency
NESREA	National Environmental Standard Regulatory Agency
OGAPIP	Ogun State Agriculture Production and Industrialization Program
OGEPA	Ogun Environmental Protection Agency
OGMOE	Ogun State Ministry of Environment
OGMOEST	Ogun State Ministry of Education Science and Technology
PAD	Project Appraisal Document
PC	Project Coordinator
PDO	Project Development Objective
PMP	Pest Management Plan
PIU	Project Implementation Unit
RPF	Resettlement Policy Framework
SDP	Social Development Plan
SEP	Stakeholders Engagement Plan
SESP	State Education Sector Plan
SSO	Social Safeguard Officer
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infections
TC	Technical College
TVET	Technical Vocational Education & Training

Note: USD to Naira exchange rate used (1 USD = 365.00 Naira)

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EXECUTIVE SUMMARY

ES1: Background

The Ogun State Government is requesting support from the World Bank to fund the Ogun State Economic Transformation project (OGSTEP) through an Investment Project Financing (IPF) instrument. The rehabilitation of Six (6) Government Science and Technical Colleges (GSTCs) which will involve minor civil works is one of the sub-projects under the program.

ES2: Legal and Institutional Framework

The project will be guided by applicable Federal and State policies and regulatory framework, and the World Bank operational safeguard policies. The project will comply with the Ogun State Policy on Environment backed by the National Policy on Environment which provides a framework for environmental protection and sustainable development. Ogun State Ministry of Environment and the Federal Ministry of Environment (FMEnv) provide procedures for conducting Environmental Assessments for development projects in line with the Environmental Impact Assessment Act No. 86, 1992. In addition, Ogun State Environmental Protection Agency (OGEPA) is an agency charged with protecting the environment in the State. Specifically, to coordinate the waste management aspect of the environment, domestic and industrial pollution control and ensures Environmental Compliance to environmental laws in the State. The project will be guided by other State policies on education, land use, gender, child rights and labour. which have been domesticated from the federal provisions, and relevant international frameworks.

This sub-project triggered the World Bank's OP/BP 4.01: Environmental Assessment and OP 4.04 Natural Habitat. An Environmental and Social Management Framework (ESMF) has been prepared as a standalone safeguard framework document to provide a clear process to integrate environmental and social considerations into the project. The ESMP has been guided by the applicable policies, legal and institutional frameworks as provided in Chapter 2 on Policy. Legal and Institutional Framework of the ESMF.

ES3: Scope of Civil Works under the Rehabilitation of the Technical Colleges (TCs)

- i. Site clearance - This will include minimal clearing of shrubs and grasses within the school premises to create access for machinery to the work sites
- ii. Removal of asbestos ceilings/roofs, replacement of ceiling/reroofing - almost all the buildings within the school have asbestos ceiling which is a toxic material
- iii. Painting of buildings within the school
- iv. Replacement of windows and doors in the buildings
- v. Rehabilitation of toilet facilities – upgrade of existing facilities and provision of hygiene facilities
- vi. Reflooring of the printing craft workshops – refilling of floor base and covering

ES4: Potential Environmental and Social Impacts

The rehabilitation works is expected to have high positive environmental and social impacts in the project area as it will improve learning facilities and by implication quality of graduates. The potential adverse impacts are summarized in the table below

POTENTIAL ADVERSE IMPACTS	
SOCIAL IMPACTS	ENVIRONMENTAL IMPACTS
<ul style="list-style-type: none">• There may be a minor increase in traffic along the major road as a result of intermittent movement of equipment and materials into the site. This will impact on travel time, and may result in negative perception about the project, amongst road users, residents.• Disruption of school activities from project activities• Accidents involving vehicles or pedestrians during vehicle and equipment movement to the site.• Grievances and negative perception may arise amongst contractors, school management, students, community people and other stakeholders• Risk of Increase in sexual activities leading to possible spread of STDs/STIs, GBV/SEA, social vices due to presence of contractors to the community	<ul style="list-style-type: none">• Increase in amounts of fugitive dust, exhaust fumes and GHGs from movement of heavy-duty vehicles and equipment into work areas: machinery exhaust fumes (nitrogen oxides (NOX), carbon monoxide (CO), sulphur oxides (SOx), and suspended particulates) and dusts from excavation and other activities will impact negatively on air-quality.• Air pollution from asbestos dusts which is carcinogenic• Stationary vehicles and heavy equipment (positioned over a long period) may lead to surface soil compaction. Surface soil will also be compacted during frequent movement of vehicles and heavy equipment can induce ground motion (vibrations).• Oil, and chemical leakages from work vehicles and equipment may lead to soil contamination and the loss of beneficial soil flora and fauna.• Noise impacts from civil works including machineries, exceeding WHO/FMEnv permissible limits (90 db/70db)• Presence of asbestos waste on site from removal of asbestos ceiling which is toxic• Construction and electronic waste• Occupational Health and Safety risks

ES5: Environmental and Social Mitigation and Monitoring Programme

As part of this ESMP, a project specific management and monitoring plan has been developed. This plan establishes environmental and social action plans with well-defined desired outcomes and actions to address all potential environmental and social impacts identified for the project.

The major differences in the Environmental and Social Mitigation and Monitoring Programme for each TC is based on presence of hostels in some schools, number/size of buildings to be rehabilitated, absence of perimeter fence in some TCs, need for building demolition and reconstruction in some colleges, built up project areas and community culture (social influence).

The total estimated cost for the ESMP and Monitoring Program is estimated at One Hundred and Fifteen Thousand, Two Hundred (\$115,200.00) dollars (N42,048,000.00) for the six (6) technical colleges.

ES6: Implementation Schedule

The activities related to environmental and social management and monitoring will be integrated in the overall rehabilitation schedule. The project implementation phase for each college is estimated to be completed in eight (8) months.

ES7: Institutional Arrangement for ESMP and Monitoring Plan

The environmental and social impacts and their enhancement and mitigation measures shall be monitored during pre-construction, construction/rehabilitation, and operation and maintenance phases. The Environmental and Social Safeguards Unit of the PIU shall coordinate the ESMP implementation and monitoring activities. Table 10 presents detailed roles and responsibilities matrix for monitoring the environmental and social impacts and the implementation of the ESMP.

ES8: ESMP Cost Estimates

The total estimated cost for the ESMP implementation and monitoring is One Hundred and Forty-Eight Thousand, Two Hundred and Ninety-Six (\$148,296.00) dollars (₦54,894,262.00) for the six technical colleges. The breakdown of costs is shown below.

Item	GSTC Ijebu Ode	GSTC Ayetoro	GSTC Igbesa	GSTC Ajegunle	GSTC Idi-Aba	GSTC Ilara Remo	Cost (\$)	Cost (₦)
Mitigation	12,250	13,850	10,150	14,200	14,050	8,500	73,000	26,645,000
Monitoring	7,400	7,400	6,800	7,400	7,800	5,400	42,200	15,403,000
Capacity Building	-	-	-	-	-	-	22,000	8,030,000
Budget for Grievance Redress	--	-	-	-	-	-	3,650	1,332,250
Budget for Disclosure	-	-	-	-	-	-	2,383.5	870,000
SUB- TOTAL							141,234	52,280,250
Contingency 5%							7,061.7	2,614,012.5
Grand Total							148,296	54,894,262.5

ES9: Stakeholders Consultation

Stakeholders consultations formed an integral part of the ESMP preparation. Stakeholder consultation in the 6 TCs took place between 14th – 21st February 2019. Details of consultations are provided in chapter nine.

Stakeholder consultations by the PIU, contractors, consultant will remain an on-going exercise throughout the duration of the entire project.

ES10: ESMP Disclosure

This ESMP shall be disclosed to the public at designated centers in Ogun State and published in two national newspapers accessible to the project stakeholders for review, in line with the guidelines of the Federal Ministry of Environment and in the external website of the World Bank.

CHAPTER ONE: INTRODUCTION

The introduction provides a background to the OGSTEP, the need for the rehabilitation of the technical colleges and the scope of works to be carried out. The objective and rationale for the ESMP is also stated.

1.1 Background

The Ogun State Government is requesting support from the World Bank to fund the Ogun State Economic Transformation Project (OGSTEP) The rehabilitation of six (6) Government Science and Technical Colleges (GSTCs) which will involve minor civil works is one of the sub-projects under the program. The location of the six Technical Colleges (TCs) is presented in Table 1 below.

Table 1: Locations of the Six Technical Colleges to be Rehabilitated

S/N	Technical College	Geographical Coordinates
1	Government Science and Technical College, Idi-Aba Abeokuta South LGA	X:7.14594320 Y:3.36493793
2	Government Science and Technical College, Ijebu-Ode LGA	X:6.82906183 Y:3.94259255
3	Government Science and Technical College, Ilara Remo, Remo North LGA	X:6.93742180 Y:3.71654013
4	Government Science and Technical College, Igbesa, Ado-Odo/Otta LGA	X:6.54207931 Y:3.12446895
5	Government Science and Technical College, Ajegunle, Ewekoro LGA	X:6.8865189 Y:3.12003300
6	Government Science and Technical College, Ayetoro, Yewa North LGA	X:7.23450861 Y:3.02090158

1.2 Rationale for the Intervention Work

Most of the infrastructure in the Technical Colleges (classrooms, workshops, administrative blocks, toilets, hostels and perimeter fences) are dilapidated and in dire need of rehabilitation. The workshops also need minimal expansion to accommodate the number of students that use the facility. In addition, the ceiling within the schools are made with asbestos which is highly toxic.

1.3 Scope of Civil Works

The proposed scope of civil works to be carried out under the rehabilitation of buildings varies from one college to another but will involve site clearance, removal of asbestos ceiling, replacement of roof, renovation and rehabilitation of buildings, rehabilitation of toilet facilities.

1.4 Objective and Rationale for the ESMP

The proposed works are envisaged to have potential negative environmental and social impacts which will be site specific, reversible and manageable through appropriate mitigation measures. The ESMP identifies the environmental and social impacts of the proposed project and defines roles and responsibilities of all stakeholders throughout project life cycle in order to ensure that mitigation measures are implemented, and overall sustainability of the project is assured.

CHAPTER TWO: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR GSTC IJEBU-ODE

The situational analysis of GSTC Ijebu-Ode is presented in this chapter including description of the project environment. The scope of works to be carried out, and a detailed ESMP table for mitigation and monitoring of potential negative impacts.

2.1 Project Description

The College was established in 1989 and is a state-owned Technical College under the management of the Ogun State Ministry for Education on 14.548 hectares (35.948 acres) land as shown in figure 1. The school has a total of 677 students: 583 male and 94 females. The school has male and female hostels within the compound housing about 100 students, and staff quarters housing about 19 staff members. (Field assessment for ESMP, OGSTEP, Feb 2019). The school offers 8 courses including carpentry and joinery, electrical and maintenance, furniture craft, printing craft, bricklaying and concreting, painting and decoration, and catering.

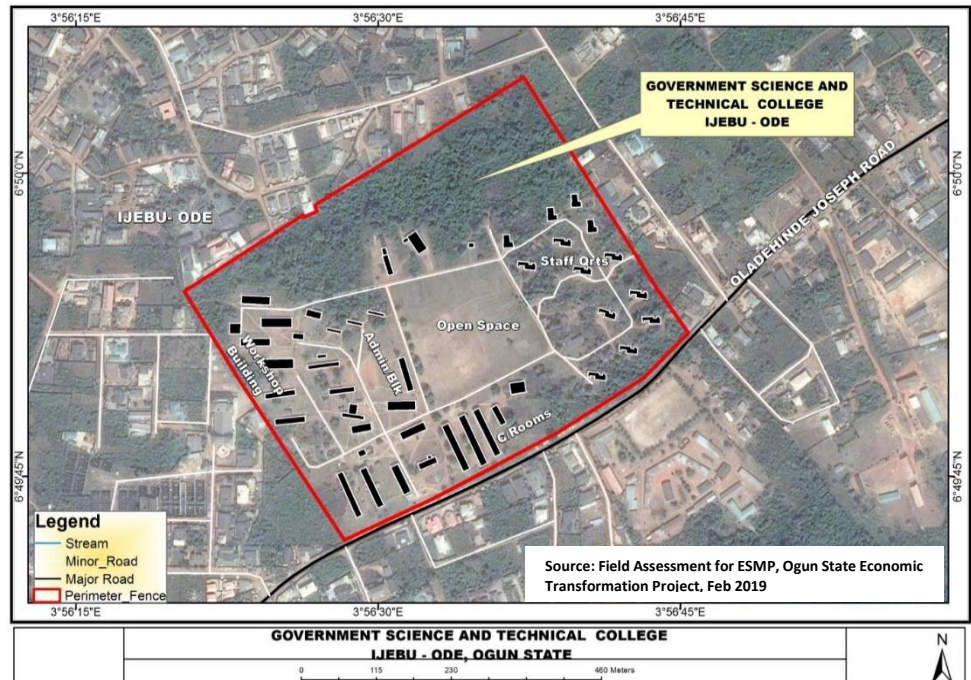


Figure 1: Map Showing GSTC Ijebu-Ode, Ogun State

The buildings within the college (classrooms, workshops, administrative blocks, toilets) are dilapidated and in need of rehabilitation. The workshops also need minimal expansion to accommodate the number of students that use the facility. The plates below show pictures of the dilapidated structures in the school.



Plate 1: Incomplete Computer Laboratory



Plate 2: Cracked building



Plate 1: Dilapidated Female Toilet Facility



Plate 4: Disorganised workshop which gets very hot because the ceiling has fallen off

The rehabilitation works will include:

- minor clearing along existing routes to allow access to the buildings to be rehabilitated;
- removal of asbestos ceiling, roofing sheets, broken windows and doors, scraping of washed off paints, scraping of dented floors;
- filling of cracked walls, fortification of sub-base, fixing of ceiling, re-roofing, replacement of doors & windows, re-flooring, repainting;
- upgrade of toilet facilities to modern toilets and provision of hygiene facilities;
- completion of computer lab and organisation of workshops; and
- renovation of hostels and staff quarters.

The project area is located within a peri-urban built up area of Ijebu-Ode local government area of Ogun State.

2.2 Project Location

Ijebu Ode is the second largest city in Ogun state. It is located in Ijebu Ode local government area of the state. The land area mass is 192km² (74sq mi), Ijebu ode is the capital of Ijebu kingdom because for several centuries it dominated trade between the ports of the Lagos lagoon and the Yoruba hinterland (especially Ibadan). The town has an estimated population of 218,600 residents. Ijebu-Ode is situated along the highway between Shagamu and Benin City. (Amy McKenna; britannica.com/place/Ijebu-Ode).

2.3 Description of Environmental Baseline Conditions

Environmental Parameter	Description
Soil and Vegetation	The soil type of this area is flat and sandy. The state's vegetation is divided into three distinctive zones, namely swampy vegetation with mangroves, where the state shares boundary with Atlantic Ocean, rainforest vegetation, and forest vegetation. Ijebu-Ode is characterized by derived forest vegetation having been altered by anthropogenic activities.
Topography	Ijebu-Ode and its environs is located on geological transition zone from the Precambrian migmatite gneiss rocks and cretaceous sedimentary rock units of Abeokuta Group. It has unique geological structures, complex coexistence of different rock types and poorly defined basal/lateral contacts between the basement and sedimentary rocks.
Climate	The city has a tropical climate, the temperature here averages 27.1C, precipitation here averages 1238mm. The temperatures are highest on average in March, at around 29.1C, while at 25.1C on average, August is the coldest month of the year. The town experiences some

	seasonal variation in the perceived humidity. The muggier period of the year lasts for 11 months, during which the comfort level is muggy, oppressive at least 80% of the time.
Rainfall	Rainfall in Ijebu-Ode shows variation within the months. The town experiences extreme seasonal variation in monthly rainfall. The rainy period lasts for 8-10months, while rainless period of the year lasts for 1.8months.
Air Quality	The area is moderately clean. There are no open dumpsites, no much cases of open burning. As a result of this the air quality is moderate and acceptable
Noise Pollution	The College is located in a Government reserved area where most buildings are for residential purpose; therefore, the noise level in this area is acceptable.

Climate data source: <https://en.climate-data.org/africa/nigeria/ogun/ijebu-ode-392311/>

(Field assessment for ESMP, OGSTEP, Feb 2019)

2.4 Description of Socio-economic baseline Conditions

Host Community	GSTC Ijebu-Ode is located along Eruwon road, at a Government Reserved Area in the outskirts of the town; the community is well populated. The surrounding villages of this host community are Eruwon, Igbeba and Erigo amongst others. The artisans in this town are known for their handwork in iron.
Urbanisation	The town has been a centre for and driver for commercial, political and cultural life that has a major influence on the state, the towns surrounding it. The town is undergoing a demographic transition, and there has been a rapid change in population health due to changes in lifestyle mainly as a result of urbanization in the town. The town has grown phenomenally as result of the pace in urbanization.
Transportation	The mode of transportation in this community is mainly by road (cars, bikes, and tricycles)
Agriculture	Ijebu ode is a major collecting station for Kola nuts that are purchased for trucking to the northern states. Ijebu-Ode also serves as a collecting point for cocoa, palm oil and kernels, which are exported from Lagos. Local trade is primarily in yams, cassava, corn, palm produce and oranges; rubber, timber are all-important commercial product in the area. Yams, cassava, corn, mango, orange, cashew, grape, palm produce and oranges; rubber, timber are all-important commercial product that are grown in the area. Medicinal plants grown are efinrin., bitterleaf, and dongoyaro. There are no endangered species identified in the community.
Education and Educational Facilities	The community is home to the Ogun State College of education, Muslim and Christian teacher training colleges.
Ethnic composition	The largest inhabitants of the city are the Ijebus, a sub-group of Yoruba ethnic group that speak Ijebu dialect. Some of the settlers in this town are the Igbos, Hausas, Binis etc.
Leadership Pattern	The Awujale of Ijebu-Ode land is the paramount ruler of the town and in his capacity heads the other community kings. Ijebu-Ode Development Association, Ijebu-Ode Youth Development Association, Justice Development and Peace Commission are all groups and Community Based -organisation(CBO) in this community.
Occupation	The standard of living in this area is average as residents are mainly civil servants, traders, subsistence farmers and artisans (furniture, aluminum fixing, carpentry, welding, bricklaying, etc.). The community's local economy depends on the Oke-Aje local market that is majorly in operation every 5days.
Religious affiliations	The major religion practiced here is Christianity and Islam. The community believes in traditional ethics. Marriages are been held in church, traditional, court, and in the mosques according to the belief of the resident. The cultural festival in this community is the egungun and the Alagemo festivals. The Alagemo has a revered shrine, likewise

	the oro shrine, these shrines are promoting their cultural heritage. During the Alagemo and Oro festivals, women are not allowed to come out, as it is a taboo for them
Amenities in the Community:	<p>The community is a host to two Primary Health Centres, located at Eruwon road and the other one is situated Behind the College, GRA Ijebu-ode. There are hospitals for infectious diseases and a leprosy settlement.</p> <p>The town is connected to the national grid and relies solely on the power from Power holding Company of Nigeria for their electricity supply. The roads in the town are fairly motorable, some of the roads are undergoing rehabilitation, and some are in bad shape, while others are motorable.</p> <p>Grievance redress system in the community is channelled through the head of the community to the paramount ruler.</p>

Source: Socio-economic field assessment for ESMP, OGSTEP, Feb 2019

2.5 Environmental and Social Mitigation and Monitoring Programme

The environmental and social action plans including parameters to be measured, methods of measurement, location of measurement, performance indicators (targets or acceptance criteria) that can be tracked over defined time periods, budget estimates and responsibilities for monitoring is presented in Table 2 below according to the project phases.

Table 2: Environmental and Social Impact Mitigation and Monitoring Plan for G\$TC Ijebu-Ode

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (USD)	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
1	Air quality deterioration: fugitive dust, exhaust fumes, GHGs	Sprinkle water via spraying devices to limit dusts.	Contractor	300 (@ \$0.15/liter x 1000 liters x twice)	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP VET/VES Report	In-situ Air Quality Measurement Visual Observation	FMEnv air pollutants permissible limit	2-3 km radius of project area	Weekly	OGMOE, OGEPA, Environment Safeguard Officer (ESO) PIU	200
		Service vehicles; undergo vehicle emission testing (VET) and vehicle exhaust screening (VES)	Contractor	350 (@ \$116.5/ser vice x 3)			FMEnv air pollutants permissible limit	On-site and nearby community	Every two months		
2	Soil erosion and soil compaction due to movement stacking of heavy-duty equipment	Limit zone of vehicle and equipment weight impacts (designate an area for parking and stacking equipment)	Contractor	100	Visible demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	300
	Soil pollution from leakages of stacked equipment and chemical substances into soil.	Fasten loose parts (bolts, nuts); Install impermeable surface at the limit zone to contain potential leakages	Contractor	200	Installation of impermeable platform at limit zone.	Soil quality test Site inspection	FMEnv soil pollutants permissible limit	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	
3	Noise	Transport equipment during holidays/after school hours (3.00pm)/ weekends	Contractor	-	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level not to exceed 90dB(A) for 8 hours	2-3Km radius of project site	Weekly	ESO, PIU OGEPA	200

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (USD)	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
4	Displacement of soil fauna and damage to flora.	Limit vegetation clearing to minimum area required to create access path	Contractor	-	Radius of cleared path	Visual Observation	Contractors compliance	School premises	During civil works	School Mgt. ESO, PIU	-
Social Impacts											
5	Delay in travel time along the major road especially on market days.	Limit movement of equipment and machinery on market days (every 5 days)/ cultural/festival day (Alegemo festival in July etc.) Traffic signs/ control	Contractor	200	No of complaints received within the project area	Site visits and observation	Traffic signs Contractors compliance	Routes through community to the school	Weekly	School Management SSO, PIU	See A3
6	Noise	Retrofit equipment with sound proof	Contractor	300	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level below 90dB(A)	2-3Km radius of project site	Weekly	SSO, PIU OGEPA	See A3
7	Occupational health and safety risks	Provide PPE (Hardhat, hand gloves, safety boots, nose masks etc.) to workers; Educate site workers; Provide first aid onsite (Scissors, Plaster, Iodine, Gentia-violent, razorblade, cottonwool, methylated spirit, forceps, bandage, dettol)	Contractor	300 (for about 40 persons) (PPES 234, First aid kit 66)	Number of incidents/ accidents	Incident/ accident report Routine inspection	Use of PPEs Contractors compliance	School premises	Weekly	PIU	200
8	Public safety	Provide caution/warning signs at sensitive locations like road bends Use trained drivers	Contractor	See A5 above	Number of incidents/ accidents	Incident/ accident report Routine inspection	Contractors compliance Caution signs	Routes through community to the school	Every 2 weeks	School Management SSO, PIU	See A5 above

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (USD)	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
Sub total				1,750,000							900

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Operation and movement of equipment/ Rehabilitation works											
Environmental Impacts											
1	Air quality deterioration from exhaust fumes, hazardous gases (NOx, CO, SOx, SPM,), Oxides from machinery operations Climate Change: Green House Gas Emissions	Service equipment and machinery regularly	Contractor	300 (@ \$100/service x 3)	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP	In-situ Air Quality Measurement	FMEnv air pollutants permissible limit	School premises	Every two months	OGMOE OG EPA ESO, PIU	300
		Switch fuel from high- to low-carbon content fuels (where available) Turn off machines when not in use	Contractor	800		Visual Observation VET/VES Report					
2	Open defecation by workers	Provide stationery toilets for workers to be handed over to the school afterwards/ Sensitize workers against open defecation	Contractor	2,500(\$500 for Sensitization + \$2000 for construction)	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt PIU	Part of routine monitoring

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
3	Open defecation by students	Phase upgrade of toilet facilities (one at a time) Complete on time	Contractor	-	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt ESO, PIU	Part of routine monitoring
4	Soil compaction from movement of vehicles /Stationary vehicles and equipment	Create limit zones Minimize compaction during stockpiling by working the soil in the dry state Rip compacted areas to reduce runoff and re-vegetate where necessary	Contractor	300 (procurement of caution signs)	Demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project site Equipment packing zones	Monthly	ESO, PIU OGEPA	200
5	Soil and groundwater contamination by oil spills, lubricants and other chemicals	Site oil and lubricants on an impervious base and should have drip pans Locate storage area far from boreholes, all containers should be clearly labeled	Contractor	300 (procurement of pans and lease of storage area)	Soil quality parameters Compliance with fuel storage procedures	In situ/ laboratory analysis Visual/ Observation	FME nv soil pollutants permissible limit	School premises	Twice during construction	ESO, PIU OGEPA	400
6	Vibrations to existing buildings and subsequent building collapse if not attended to	Install noise barrier/ acoustic shield. Limit operation to specific areas where work is carried out	Contractor	200	Presence of affected buildings	Site inspection	Machinery fitted with acoustic shield	School premises	Monthly	School Mgt. ESO, PIU	Captured as part of periodic monitoring activities
7	Pollution from presence of construction waste on-site	Implement site-specific waste management plan (annex 7) Liaise with OGEPA for effective waste management and safe handling/disposal of waste	Contractor	300	Presence of construction waste on-site	Site inspection	Compliance with waste management plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	1,000

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Removal of asbestos ceiling											
Environmental Impacts											
9	Health risk: Inhalation of Asbestos fibres which is toxic	Use of appropriate PPEs (Hardhat, Gloves, boots, overall etc.) when removing asbestos ceiling (see asbestos mgt. plan, annex 6)	Contractor	800	Gaseous emissions: asbestos dust/ particulate matter	In-situ air quality test	FME nv air pollutants permissible limit	School premises	Weekly	ESO, PIU OGEPA OGMOE	500
10	Health risk: Asbestos waste on-site which is toxic	Implement site-specific Asbestos management plan Liaise with OGEPA and PIU for effective management and safe disposal of hazardous waste	Contractor	300	Presence of asbestos ceiling on-site	Site inspection	Compliance with the asbestos mgt. plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	300
Operation and movement of equipment/ Rehabilitation works											
Social Impacts											
11	Loss of travel time due to heavy concentration of haulage vehicles on and off the project site	See A5	Contractor	300	No of complaints received within the project area	Consultations	Traffic signs Contractors compliance	Routes through community to the sites	Weekly	School Management SSO, PIU	Part of routine monitoring
12	Grievances and negative perception by community members	Conduct stakeholders consultation with the host community at every phase of the project	School Management PIU	400 (@ \$134/consultation x 3)	No of complaints by community persons	Consultations Review grievance log	Minimal number of reported cases	Host community	Every 2weeks	PIU	1,000
13	Disturbance of school activities from civil works	Most civil works should take place during holidays, weekends and after school hours	Contractor	-	No of complaints by school users	Consultations Review grievance log	Minimal number of reported cases	School premises	Every 2 weeks	School Management SSO, PIU	Part of routine monitoring

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
14	Respiratory infections from air contamination by exhaust fumes and dust	Regular sprinkling of water during rehabilitation works. Distribute face masks to workers and PAs	Contractor	500	Prevalence of respiratory infections reported in the school	Rapid health survey	Availability of face masks on site	School premises	Weekly	School Mgt. PIU Primary Health Workers	300
15	Labor influx ¹ : Increase in spread of STDs/STIs in project area	Conduct awareness campaign on sexual diseases, and distribution of male and female condoms in conjunction with the PIU	Contractor	500	Level of Awareness and Education No of new STI cases	Rapid health survey	Level of awareness on preventive measures. % of reported STI/ STD cases	Project area of influence Health care facilities	Twice during Construction	SSO, PIU Primary Health Care Workers	200
16	Labor Influx: Potential risk of Sexual Exploitation and Abuse (SEA)/ Gender Based Violence (GBV)	All contractors workers to sign Code of Conduct (CoC) (annex 8) Sensitize workers on zero tolerance for sexual integration with students/ community School Mgt. and Parents Teachers Association (PTA) to sensitise students on safety habits, zero sexual integration with contractors and reporting mechanism for incidents Community leaders/ women group/youth group to sensitise the community on appropriate conduct with contractors	Contractor School Management	- (part of OHS training by contractor and routine PTA meeting by school management)	Stakeholders concerns on risk of GBV	Consultations GBV Incident Report	Signed CoCs with the PIU Conduct of sensitization campaigns	School premises Host community	Twice during Construction	SSO, PIU	300

¹ It is expected as part of minimizing labour influx that the contractor recruits local labour for the rehabilitation activities. However, the contractor is also expected to come along with their skilled staff (minimum of 15 persons) to oversee the project execution.

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
17	Cultural integration may be affected by foreigners who do not understand the culture	School management to sensitize contractor workers on the cultures of the project area (dos and don'ts, festivals etc.)	School Management	-	No of complaints from the host community	Consultation Incident Report	Conduct of sensitization campaigns	Host community	One-off	PIU	-
18	Conflicts between contractors, school, communities	Good work enforcement program Grievance Redress Mechanism Regular consultations	Contractor Grievance Redress Committee (GRC)	200	No of complaints received	Consultation Review Grievance redress Log	No of cases handled by the GRC	School premises Project area of influence	Continuous	Grievance Redress Committee	800
19	Increase demand on existing community health and sanitation infrastructure due to influx of temporary workers	Provide all basic amenities (water, sanitation etc. to workers)	Contractor	1,200	Amenities in workers camp/ project site	Visual observation	Availability of all essential amenities in workers' camp	Workers campsite Host community	Monthly	ESO, PIU SSO, PIU	Part of routine monitoring
20	Vehicular or on-site accident	Prepare and implement an OHS Plan to coordinate OHS issues during the construction phase.	Contractor	300	No of reported accidents	Reporting and feedback mechanism Accident Report	Zero/ minimal accident reports	School premises Host community	Continuous	ESO, PIU SSO, PIU	200
21	Risk of occupational accidents, injuries and diseases	Implement project specific OHS Plan Provide and enforce the use of appropriate PPE.	Contractor	500	OHS Plan No of reported cases	Accident Report	Compliance with OHS Plan	School premises	Monthly	ESO, PIU SSO, PIU	200
Sub Total				10,700							5,700

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
Demobilization of equipment and construction materials from the school											
Environmental Impacts											
1	Soil and water contamination from oil/lubricants	Cart away all spoils through the relevant authorities Clean out impact areas	Contractor	500	Oil Spillages, construction waste and spoilt equipment/parts	Site inspection	Good house keeping	School premises Workers Campsite	Quarterly	ESO, PIU	200
Operation and use of facilities											
2	Waste generation	Implement on-site waste management plan on a continuous basis	School Mgt	Part of yearly budget	Air, water and soil pollutants	In-situ air, water and soil sampling	Good waste management practice	School premises	As required	OGEPA	Part of annual budget
Demobilization of equipment and construction materials from the school											
Social Impacts											
3	Disruption in learning activities.	Limit demobilization activities to non-school periods	Contractor	-	No of complaints from school users	Interview	Stakeholders satisfaction with activity	School premises	As required during	School Mgt.	-
Operation and use of rehabilitated facilities											
Social Impacts											
4	Operation Failures of renovated facilities may cause frustration	Routine checks and maintenance in accordance to schedule	School Management	Part of yearly budget	No of complaints of Equipment failure report	Inspection Satisfaction Survey amongst	Student/ teachers satisfaction level with new facilities	School premises	Quarterly	OGMOEST TVET Board	Part of yearly budget

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
		Timely reporting and fixing of faults				students/ teachers					
5	Enhanced school infrastructure will increase enrolment demand beyond the capacity of the school	Proper documentation of minimum standards for enrolment including cut-off numbers	School Management PTA	Part of yearly budget	No of complaints received on subject matter	Review of school standards documentation Stakeholder Perception survey	Stakeholders perception about the school	Project area of influence	Every two years	OGMOEST TVET Board	Part of yearly budget
Sub Total				500							200
TOTAL				12,250							7,400

CHAPTER THREE: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR GSTC AYETORO

The situational analysis of GSTC Ayetoro is presented in this chapter including description of the project environment. The scope of works to be carried out, and a detailed ESMP table for mitigation and monitoring of potential negative impacts.

3.1 Project Description

The College was established in 1992 and is a state-owned Technical College under the management of the Ogun State Ministry for Education on 31.005 Hectares (76.614 acres) land as shown in figure 2. The school has a total of 974 students and 44 admin staff. The school offers a range of courses including carpentry and joinery, electrical and maintenance, welding,

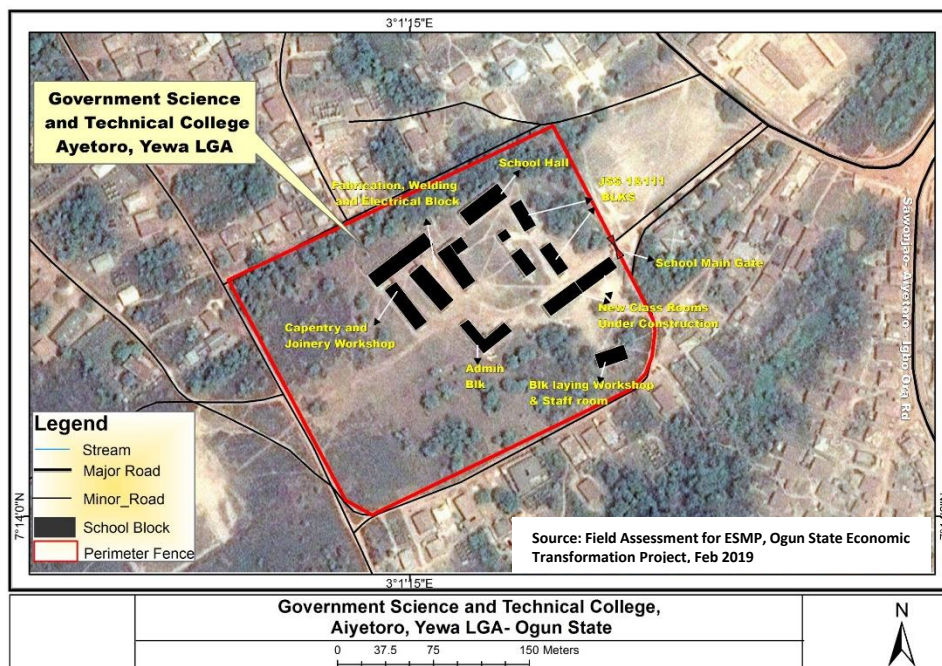


Figure 2: Map of GSTC Ayetoro, Yewa North LGA

The buildings within the college (classrooms, workshops, administrative blocks, toilets) are dilapidated and in need of rehabilitation. The workshops need to minimal expansion to accommodate the number of students that use the facility. The plates below show pictures of the dilapidated structures in the school.



Plate 5: Bent and falling roof on building

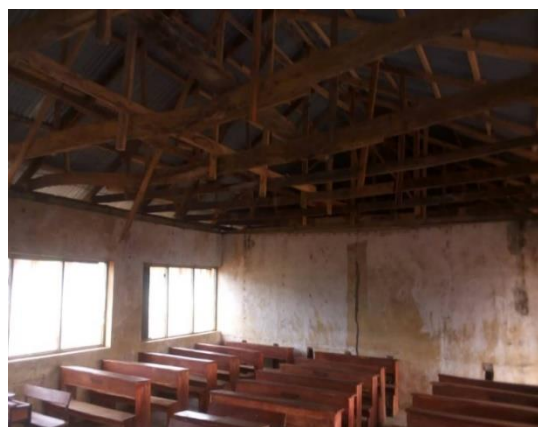


Plate 6: No ceiling in a classroom



Plate 7: Asbestos ceiling



Plate 8: Damaged building

The rehabilitation works will include:

- erection of perimeter fence round the school;
- demolition and reconstruction of dilapidated buildings;
- removal of asbestos ceiling, roofing sheets, broken windows and doors, scraping of washed off paints, scraping of dented floors;
- filling of cracked walls, fortification of sub-base, fixing of ceiling, re-roofing, replacement of doors & windows, re-flooring, repainting; and
- upgrade of toilet facilities to modern toilets and provision of hygiene facilities.

The project area is located within a peri-urban built up area of Ayetoro Yewa North local government area of Ogun State.

3.2 Project Location

Ayetoro town is the headquarters of Yewa North local government area of Ogun state. The LG is in Ogun west senatorial district along imeko afon, yewa south, ipokia and Ado-Odo/Ota local government areas. Yewa North local government area covers an area of 2,087km², making it the biggest local government by area in Ogun state. The estimated population of residents in the local government is 181,826. (Amy McKenna, <https://www.britannica.com/place/Ayetoro>)

3.3 Description of Environmental Baseline Conditions

Environmental Parameter	Description
Soil and Vegetation	The soil in this part of the state is sandy and is developed over a deeply weathered layer of sedimentary rocks consisting of false bedded sandstones which underlies the area. The vegetation in this area is derived savannah.
Topography	The sediments are of lower cretaceous rocks or Abeokuta formation. The entire area is made up of an undulating surface drained mainly by Rori and Ayinbo rivers. The landform is that of eroded pediment plain with well incised valleys forming a trellis pattern.
Climate	Ayetoro lies on the latitude 70 12' N and longitude 30 3' E in a deciduous derived savannah zone of Ogun state. The climate is sub humid tropical with a long time annual rainfall of 1,909.30mm.

Rainfall	Rainfall in Yewa North shows variation within the months. The town experiences extreme seasonal variation in monthly rainfall. The rainy period lasts for 8-10months, while rainless period of the year lasts for 1.8months.
Air Quality	Studies shows some parts of this local government experience air pollution as a result of the cement industry situated in the area. The air quality in the area is questionable because stringent environmental measures are not in place to control the pollution.
Noise Pollution	As a result of the industries located in this LGA, there are bound to be noise emanating from industrial activities, movement of heavy duty machines and equipment

Climate data source: <https://en.climate-data.org/africa/nigeria/ogun/Ayetoro/>
(Field assessment for ESMP, OGSTEP, Feb 2019)

3.4 Description of Socio-economic baseline Conditions

Host Community	Ayetoro community was founded in the year 1902, The town is been ruled by Oba Asegun, who is the traditional head of Ayetoro, he is been supported by the Iyalode and the Asaaju of Ayetoro. Surrounding villages are Saala, Eemado, Joga, Aibo, Kesan, Ketu, ilogun, Ago-owo, olowu, Ayegbami, Ifekowajo etc. Women in Ayetoro play vital roles in community events and contribute their own quota to the development of the town. The town has women leaders in various capacities, for instance there is an Iyaloja who is appointed to monitor the traders and trading activities in the town.
Urbanisation	Ayetoro is about 35km northwest of Abeokuta, is also the administrative seat of Yewa North local government, it has enjoyed drive for commercial, political and cultural life, this has been a major influence on the town, surrounding towns, the senatorial zone and the state as a whole.
Transportation	The mode of transportation in this community is mainly by road (cars, bikes, and keke Napep)
Agriculture	Their major occupation is farming and trading, the local government is endowed with large expanse of fertile land which they use to specialize in different food and cash crops with a large deposit of mineral resources such as limestone and kaolin for industrial potentials. It is connected to Lagos by road and rail and serves as the shipping centre for an area in which cocoa, cassava, cowpea and maize are produced. Economic trees found in the community are iroko, araba and Apa. Cocoa, coffee, cotton forms the cash crops cultivated in the community. The medicinal plants valued by the residents are cashew, oruwo and grapes. Animals predominant in the community are goats, sheep, dogs, sheep, cat etc. Lions, hyena, tiger are wild and endangered animals that can also be found in this town
Education and Educational Facilities	The community has primary schools, secondary schools and tertiary institution. The community is home to Olabisi Onabanjo University (OOU), College of Agricultural Science, the Yewa Central College of education, the famous Ayetoro comprehensive school, government technical college, primary schools, private educational institutions etc.
Ethnic composition	The Ketu sub-ethnic group is found to be the inhabitants of this town, with other ethnic sub-groups like Oho, and Ifonyin. The various sub-ethnic groups that are today known as Yewa were administratively grouped under the Egbado division.
Leadership Pattern	The town is been ruled by Oba Asegun, who is the traditional head of Ayetoro, he is been supported by the Iyalode and the Asaaju of Ayetoro. The ayetoro community has a relatively good history of peaceful co-existence among its people, because it is a well-coordinated community that has high respect for native authority residual in the Obaship institution, this has played significant roles in native administration, native laws, peace and security including societal norm and values.

Occupation	The standard of living in this area is average as residents are mainly farmers and traders; there is also the presence of artisans (furniture, aluminum fixing, carpentry, welding, bricklaying, etc.) in the community. The town has 3 local markets that form the bedrock of their economy.
Religious affiliations	The religion embraced by this community is the Christianity, Islam and traditional religion. Marriages are been held in church, traditional, court, and in the mosques according to the belief of the resident. The people of Ayetoro celebrate egungun, oro, gelede yearly, which is a heritage. Sacred shrines within the community are kesian and the Eemado shrine. There are a lot of things regarded as taboos and myths in the community, the Saala quarters celebrates Oro festival around July and August every year. No female indigene goes out around the place between 9pm till 5am during the Oro festival. Saala, Kesian and Eemado quarters are also known for their Egungun festival. When Lageku who opens the egungun festival comes out, nobody should see him.
Amenities in the Community:	The people of this community rely on the 2 functional hospitals a primary health and Secondary health centres located at Isale Araba and Saala quarters respectively. There are moderately good road network within the community and roads linking the community to other towns. The town is connected to the national grid and relies solely on the power from Power holding Company of Nigeria for their electricity supply. Land ownership system in this town can be termed inheritance and family system of ownership. Grievance redress mechanism is mainly by family settlement.

Source: Socio-economic field assessment for ESMP, OGSTEP, Feb 2019

3.5 Environmental and Social Mitigation and Monitoring Programme

The environmental and social action plans including parameters to be measured, methods of measurement, location of measurement, performance indicators (targets or acceptance criteria) that can be tracked over defined time periods, budget estimates and responsibilities for monitoring is presented in Table 3 below according to the project phases.

Table 3: Environmental and Social Impact Mitigation and Monitoring Plan for GSTC Ayetoro

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
1	Air quality deterioration: fugitive dust, exhaust fumes, GHGs	Sprinkle water via spraying devices to limit dusts.	Contractor	300(@ \$0.15/liter x 1000 liters x twice)	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP VET/VES Report	In-situ Air Quality Measurement Visual Observation	FMEnv air pollutants permissible limit	2-3km radius of project area	Weekly	OGMOE, OGEPA, Environment Safeguard Officer (ESO) PIU	200
		Service vehicles; undergo vehicle emission testing (VET) and vehicle exhaust screening (VES)	Contractor	350 (@ \$116.5/ser vice x 3)			FMEnv air pollutants permissible limit	On-site and nearby community	Every two months		
2	Soil erosion and soil compaction due to movement stacking of heavy-duty equipment	Limit zone of vehicle and equipment weight impacts (designate an area for parking and stacking equipment)	Contractor	100	Visible demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	300
	Soil pollution from leakages of stacked equipment and chemical substances into soil.	Fasten loose parts (bolts, nuts); Install impermeable surface at the limit zone to contain potential leakages	Contractor	200	Installation of impermeable platform at limit zone.	Soil quality test Site inspection	FMEnv soil pollutants permissible limit	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	
3	Noise	Transport equipment during holidays/after school hours (3.00pm)/ weekends	Contractor	-	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level not to exceed 90dB(A) for 8 hours working period	2-3Km radius of project site	Weekly	ESO, PIU OGEPA	200

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
4	Displacement of soil fauna and damage to flora.	Limit vegetation clearing to minimum area required to create access path	Contractor	-	Radius of cleared path	Visual Observation	Contractors compliance	School premises	One-off	School Mgt. ESO, PIU	-
Social Impacts											
5	Delay in travel time along the major road especially on market days.	Limit movement of equipment and machinery on market days (every 5 days)/ cultural/festival days Traffic signs/ control	Contractor	200	No of complaints received within the project area	Site visits and observation	Traffic signs Contractors compliance	Routes through community to the school	Weekly	School Management SSO, PIU	See A3
6	Noise	Retrofit equipment with sound proof	Contractor	300	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level below 90dB(A)	2-3Km radius of project site	Weekly	SSO, PIU OGEPA	See A3
7	Occupational health and Safety risks	Provide PPE (hardhat, hand gloves, safety boots, nose masks etc.) to workers; Educate site workers; Provide first aid onsite (Scissors, Plaster, Iodine, Gentia-violent, razorblade, cottonwool, methylated spirit, forceps, bandage, dettol)	Contractor	500 (for about 50 persons) (390 for PPEs, 110 for first aid kit)	Number of incidents/ accidents	Incident/ accident report Routine inspection	Use of PPEs Contractors compliance	School premises	Weekly	PIU	200
8	Public Safety	Provide caution/warning signs at sensitive locations like road bends Use trained drivers	Contractor	See above A5	Number of incidents/ accidents	Incident/ accident report Routine inspection	Contractors compliance Caution signs	Routes through community to the school	Every 2 weeks	School Management SSO, PIU	See above A5

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
Sub total				1,950							900

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Operation and movement of equipment/ Demolition/ Rehabilitation works											
Environmental Impacts											
1	Air quality deterioration from exhaust fumes, hazardous gases (NOx, CO, SOx, SPM,), Oxides from machinery operations Climate Change: Green House Gas Emissions	Service equipment and machinery regularly	Contractor	300 (@ \$100/service x 3)	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP	In-situ Air Quality Measurement	FMEnv air pollutants permissible limit	School premises	Every two months	OGMOE OG EPA ESO, PIU	300
		Switch fuel from high- to low-carbon content fuels (where available) Turn off machines when not in use	Contractor	1200		Visual Observation VET/VES Report					
2	Open defecation by workers	Provide stationery toilets for workers to be handed over to the college afterwards/ Sensitise workers against open defecation	Contractor	2,500 (\$500 for Sensitization + \$2000 for construction)	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt PIU	Part of routine monitoring

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
3	Open defecation by students	Phase upgrade of toilet facilities (one at a time) Complete on time	Contractor	-	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt ESO, PIU	Part of routine monitoring
4	Soil compaction from movement of vehicles /Stationary vehicles and equipment	Create limit zones Minimize compaction during stockpiling by working the soil in the dry state Rip compacted areas to reduce runoff and re-vegetate where necessary	Contractor	500 (procurement of caution signs)	Demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project site Equipment packing zones	Monthly	ESO, PIU OGEPA	200
5	Soil and groundwater contamination by oil spills, lubricants and other chemicals	Site oil and lubricants on an impervious base and should have drip pans Locate storage area far from boreholes, all containers should be clearly labeled	Contractor	300 (procurement of pans and lease of storage area)	Soil quality parameters Compliance with fuel storage procedures	In situ/ laboratory analysis Visual/ Observation	FME nv soil pollutants permissible limit	School premises	Twice during construction	ESO, PIU OGEPA	400
6	Vibrations to existing buildings and subsequent building collapse if not attended to	Install noise barrier/ acoustic shield. Limit operation to specific areas where work is carried out	Contractor	800	Presence of affected buildings	Site inspection	Machinery fitted with acoustic shield	School premises	Monthly	School Mgt. ESO, PIU	Captured as part of periodic monitoring activities
7	Pollution from presence of demolition and construction waste on-site	Implement site-specific waste management plan (annex 7) Liaise with OGEPA for effective waste management and safe handling/disposal of waste	Contractor	1000	Presence of construction waste on-site	Site inspection	Compliance with waste management plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	1,000
Removal of asbestos ceiling											

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Environmental Impacts											
8	Health risk: Inhalation of Asbestos fibres which is toxic	Use of appropriate PPEs when removing asbestos ceiling (see asbestos mgt. plan, annex 7)	Contractor	800	Gaseous emissions: asbestos dust/particulate matter	In-situ air quality test	FME _{env} air pollutants permissible limit	School premises	Weekly	ESO, PIU OGEPA OGMOE	500
9	Health risk: Asbestos waste on-site which is toxic	Implement site-specific Asbestos management plan Liaise with OGEPA for effective management and safe disposal of hazardous waste	Contractor	300	Presence of asbestos ceiling on-site	Site inspection	Compliance with the asbestos mgt. plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	300
Operation and movement of equipment/ Demolition/ Rehabilitation works											
Social Impacts											
10	Loss of travel time due to heavy concentration of haulage vehicles on and off the project site	See A5	Contractor	300	No of complaints received within the project area	Consultations	Traffic signs Contractors compliance	Routes through community to the sites	Weekly	School Management SSO, PIU	Part of routine monitoring
11	Grievances and negative perception by community members	Conduct stakeholders consultation with the host community at every phase of the project	School Management PIU	400 (@ \$134/consultation x 3)	No of complaints by community persons	Consultations Review grievance log	Minimal number of reported cases	Host community	Every 2 weeks	PIU	1,000
12	Disturbance of school activities from civil works	Adopt Phased rehabilitation: Lectures should be moved to other classrooms where works hasn't commenced. Most civil works should take place during holidays,	Contractor	-	No of complaints by school users	Consultations Review grievance log	Minimal number of reported cases	School premises	Every 2 weeks	School Management SSO, PIU	Part of routine monitoring

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
		weekends and after school hours									
13	Respiratory infections from air contamination by exhaust fumes and dust	Regular sprinkling of water during construction works. Distribute face masks to PAPs	Contractor	500	Prevalence of respiratory infections reported in the school	Rapid health survey	Availability of face masks on site	School premises	Weekly	School Mgt. PIU Primary Health Workers	300
14	Labor influx ² : Increase in spread of STDs/STIs in project area	Conduct awareness campaign on sexual diseases, and distribution of male and female condoms in conjunction with the PIU	Contractor	500	Level of Awareness and Education No of new STI cases	Rapid health survey	Level of awareness on preventive measures. % of reported STI/ STD cases	Project area of influence Health care facilities	Twice during Construction	SSO, PIU Primary Health Care Workers	200
15	Labor Influx: Potential risk of Sexual Exploitation and Abuse (SEA)/ Gender Based Violence (GBV)	All contractors workers to sign Code of Conduct (CoC) Sensitize workers on zero tolerance for sexual integration with students/ community School Mgt. and Parents Teachers Association (PTA) to sensitise students on safety habits, zero sexual integration with contractors and reporting mechanism for incidents Community leaders/ women group/youth group to sensitise	Contractor School Management	(part of OHS training by contractor and routine PTA meeting by school management)	Stakeholders concerns on risk of GBV	Consultations GBV Incident Report	Signed CoCs with the PIU Conduct of sensitization campaigns	School Premises Host community	Twice during Construction	SSO, PIU	300

² It is expected as part of minimizing labour influx that the contractor recruits local labour for the rehabilitation activities. However, the contractor is also expected to come along with their skilled staff (minimum of 15 persons) to oversee the project execution.

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
		the community on appropriate conduct with contractors									
16	Cultural integration may be affected by foreigners who do not understand the culture	School management to sensitize contractor workers on the cultures of the project area (dos and dont's, festivals etc.)	School Management	-	No of complaints from the host community	Consultation Incident Report	Conduct of sensitization campaigns	Host community	One-off	PIU	-
17	Conflicts between contractors, school, communities	Good work enforcement program Grievance Redress Mechanism Regular consultations	Contractor Grievance Redress Committee (GRC)	200	No of complaints received	Consultation Review Grievance redress Log	No of cases handled by the GRC	School Premises Project area of influence	Continuous	Grievance Redress Committee	800
18	Increase demand on existing community health and sanitation infrastructure due to influx of temporary workers	Provide all basic amenities (water, sanitation etc to workers)	Contractor	1,500	Amenities in workers camp/ project site	Visual observation	Availability of all essential amenities in workers' camp	Workers campsite Host community	Monthly	ESO, PIU SSO, PIU	Part of routine monitoring
19	Vehicular or on-site accident	Prepare and implement a Community Affairs, Safety, Health, Environment and Security (CASHES) manual, to coordinate OHS issues during the construction phase.	Contractor	300	No of reported accidents	Reporting and feedback mechanism Accident Report	Zero/ minimal accident reports	School premises Host community	Continuous	ESO, PIU SSO,PIU	200
20	Risk of occupational accidents, injuries and diseases	Implement project specific HSE Plan Provide and enforce usage of appropriate PPE.	Contractor	500	HSE Plan No of reported cases	Accident Report	Compliance with HSE Plan	School premises	Monthly	ESO, PIU SSO,PIU	200
Sub Total				12.300							5,700

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
Demobilization of equipment and construction materials from the school											
Environmental Impacts											
1	Soil and water contamination from oil/ lubricants	Cart away all spoils through the relevant authorities Clean out impact areas	Contractor	800	Oil Spillages, construction waste and spoilt equipment/parts	Site inspection	Good house keeping	School premises Workers Campsite	Quarterly	ESO, PIU	200
Operation and use of facilities											
2	Waste generation	Implement on-site waste management plan on a continuous basis	School Mgt	Part of yearly budget	Air, water and soil pollutants	In-situ air, water and soil sampling	Good waste management practice	School premises	As required	OGEPA	Part of annual budget
Demobilization of equipment and construction materials from the school											
Social Impacts											
3	Disruption in learning activities.	Limit demobilization activities to non-school periods	Contractor	-	No of complaints from school users	Interview	Stakeholders satisfaction with activity	School premises	As required during	School Mgt.	-
Operation and use of rehabilitated facilities											
Social Impacts											
4	Operation Failures of renovated facilities may cause frustration	Routine checks and maintenance in accordance to schedule Timely reporting and fixing of faults	School Management	Part of yearly budget	No of complaints of Equipment failure report	Inspection Satisfaction Survey amongst students/ teachers	Student/ teachers satisfaction level with new facilities	School premises	Quarterly	OGMOEST TVET Board	Part of yearly budget

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
5	Enhanced school infrastructure will increase enrolment demand beyond the capacity of the school	Proper documentation of minimum standards for enrolment including cut-off numbers	School Management PTA	Part of yearly budget	No of complaints received on subject matter	Review of school standards documentation Stakeholder Perception survey	Stakeholders perception about the school	Project area of influence	Every two years	OGMOEST TVET Board	Part of yearly budget
Sub Total				800							200
TOTAL				13,850							7,400

CHAPTER FOUR: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR GSTC AJEGUNLE, IFO LGA

The situational analysis of GSTC Ajegunle is presented in this chapter including description of the project environment. The scope of works to be carried out, and a detailed ESMP table for mitigation and monitoring of potential negative impacts.

4.1 Project Description

The College was established in 1993 and is a state-owned Technical College under the management of the Ogun State Ministry for Education on 54.14 Hectares land as shown in figure 3. The school has a total of 809 students and 49 admin staff. The school has a male and female hostel.

The buildings within the school (classrooms, workshops, administrative blocks) are dilapidated, only half of the hostel facility is in use due to the inhabitable state of the hostel which needs reconstruction. Sanitation facilities are grossly inadequate and where available is not functional. The plates below show pictures of the dilapidated structures in the college.



Figure 3: Map of GSTC Ajegunle



Plate 9: Female hostel in bad shape



Plate 10: School workshop in ruins



Plate 11: Absence of Perimeter Fence and presence of vegetation



Plate 12: Asbestos ceiling

The rehabilitation works will include:

- site clearance - This will include minimal clearing of shrubs and grasses within the school compound to create clear paths for machinery to access the work sites;
- clearing of vegetation along the perimeter to erect fence;
- erection of perimeter fence round the school;
- demolition and reconstruction of dilapidated buildings;
- completion of abandoned buildings;
- removal of asbestos ceiling, roofing sheets, broken windows and doors, scraping of washed off paints, scraping of dented floors;
- filling of cracked walls, fortification of sub-base, fixing of ceiling, re-roofing, replacement of doors & windows, re-flooring, repainting; and
- upgrade of toilet facilities to modern toilets and provision of hygiene facilities.

The project area is located within a peri-urban built up area of Ajegunle, Ifo local government area of Ogun State.

4.2 Project Location

The area covers about 82,000 sq. kilometres with an estimated population of 539,170. The majority of inhabitants are Egba Alake, Egba Oke-Ona, Egba Gbagura, Egba Owu and the Aworis. (Amy McKenna, <https://www.britannica.com/place/Ajegunle>)

4.3 Description of Environmental Baseline Conditions

Environmental Parameter	Description
Soil and Vegetation	The soil in this part of the state is sandy and is developed over a deeply weathered layer of sedimentary rocks consisting of false bedded sandstones which underlies the area. The vegetation in this area is derived savannah.
Topography	Ajegunle is located on the western coastal plain of the state; it is underlain by recent sedimentary deposits of the Ilaro formation. The Ilaro formations consist of Continental Fluvialite sandstones. The sands are usually coarse, angular and poorly sorted containing significant clay fraction.
Climate	The city has sub-humid tropical climate, the temperature here averages 27.1C, precipitation here averages 1238mm. The temperatures are highest on average in March, at around 29.1C, while at 25.1C on average, August is the coldest month of the year. The town experiences

	some seasonal variation in the perceived humidity. The muggier period of the year lasts for 11 months, during which the comfort level is muggy, oppressive at least 80% of the time.
Rainfall	Rainfall in Ajegunle shows variation within the months. The town experiences extreme seasonal variation in monthly rainfall. The rainy period lasts for 8-10months, while rainless period of the year lasts for 1.8months.
Air Quality	Studies show that some parts of this region experience air pollution as a result of the industries present within the locality. The air quality in the area is questionable because stringent environmental measures are not in place to control air pollution.
Noise Pollution	As a result of the industries located in this LGA, there are bound to be noise emanating from industrial activities, movement of heavy-duty machines and equipment especially in communities that has close proximity to the industries.

Climate data source: <https://en.climate-data.org/africa/nigeria/ogun/Ajegunle/>
(Field assessment for ESMP, OGSTEP, Feb 2019)

4.4 Description of Socio-economic baseline Conditions

Host Community	The Government Technical and Science College Ajegunle is in Ajegunle. The community is a small town with the population of about 5000 people. There are three local council development areas namely; Isheri ajuwon/Akute LCDA, Agbado/Oke-Aro LCDA and Coker/Ibogun LCDA respectively.
Urbanisation	Ajegunle shares the same commercial strength with the rest of the communities in Ifo local Government Area. The region is known to host one of the biggest Cement industries in Nigeria (Lafarge Cement Company). The presence of this industry has absorbed skilled, semi-skilled and unskilled labour and has witnessed influx of such workforce into the region in search of daily living.
Transportation	The mode of transportation in this community is mainly by road (Cars, Motor cycle and bicycles)
Education and Educational Facilities	The community is home to the Government science and technical college, Ifedapo community comprehensive high school, African church primary schools and others are private schools.
Leadership Pattern	The Bale and high chief Is the highest authority in Ajegunle land followed by community development councils(chairman), iyaloja and iyalaje, Oloriodo and Akeweje .
Occupation	The standard of living in this area is above average as residents are mainly civil servants, traders, subsistence farmers and artisans.
Religious affiliations	The major religion practiced here is Christianity and Islam. The community believes in traditional ethics. Marriages are been held in church, traditional, court, and in the mosques according to the belief of the resident. The cultural festival in this community is Egungun, Oro Ogun and Sango festivals. The Oju Alale, Sango Ososi, Ogun and Egungun shrine are seen as sacred places in the community. The Myths is that the shrines protect their land from external forces.

Source: Socio-economic field assessment for ESMP, OGSTEP, Feb 2019

4.5 Environmental and Social Mitigation and Monitoring Programme

The environmental and social action plans including parameters to be measured, methods of measurement, location of measurement, performance indicators (targets or acceptance criteria) that can be tracked over defined time periods, budget estimates and responsibilities for monitoring is presented in Table 4 below in accordance to the project phases.

Table 4: Environmental and Social Impact Mitigation and Monitoring Plan for G\$TC Ajegunle

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
1	Air quality deterioration: fugitive dust, exhaust fumes, GHGs	Sprinkle water via spraying devices to limit dusts.	Contractor	300 (@ \$0.15/liter x 1000 liters x twice)	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP VET/VES Report	In-situ Air Quality Measurement Visual Observation	FMEnv air pollutants permissible limit	2-3km radius of project area	Weekly	OGMOE, OGEPA, Environment Safeguard Officer (ESO) PIU	200
		Service vehicles; undergo vehicle emission testing (VET) and vehicle exhaust screening (VES)	Contractor	350 (@ \$116.5/ser vice x 3)			FMEnv air pollutants permissible limit	On-site and nearby community	Every two months		
2	Loss of vegetation from site clearing	Clear only areas that are necessary Revegetate unused cleared areas	Contractor	550	Loss of vegetation	Visual observation	Contractors compliance	Within the school	One off	ESO, PIU	Part of routine monitoring
3	Soil erosion and soil compaction due to movement stacking of heavy-duty equipment	Limit zone of vehicle and equipment weight impacts (designate an area for parking and stacking equipment)	Contractor	100	Visible demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	300
	Soil pollution from leakages of stacked equipment and chemical substances into soil.	Fasten loose parts (bolts, nuts); Install impermeable surface at the limit zone to contain potential leakages	Contractor	200	Installation of impermeable platform at limit zone.	Soil quality test Site inspection	FMEnv soil pollutants permissible limit	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
4	Noise	Transport equipment during holidays/after school hours (3.00pm)/ weekends	Contractor	-	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level not to exceed 90dB(A) for 8 hours working period	2-3Km radius of project site	Weekly	ESO, PIU OGEPA	200
5	Displacement of soil fauna and damage to flora.	Limit vegetation clearing to minimum area required to create access path	Contractor	-	Radius of cleared path	Visual Observation	Contractors compliance	School premises	One-off	School Mgt. ESO, PIU	-
Social Impacts											
6	Delay in travel time along the major road especially on market days.	Limit movement of equipment and machinery on market days (every 5 days)/ cultural/festival days Traffic signs/ control	Contractor	200	No of complaints received within the project area	Site visits and observation	Traffic signs Contractors compliance	Routes through community to the school	Weekly	School Management SSO, PIU	See A3
7	Noise	Retrofit equipment with sound proof	Contractor	500	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level below 90dB(A)	2-3Km radius of project site	Weekly	SSO, PIU OGEPA	See A3
8	Occupational health risks	Provide PPE (Hardhat, hand gloves, safety boots, nose masks etc.) to workers; Educate site workers; Provide first aid onsite (Scissors, Plaster, Iodine, Gentia-violent, razorblade, cottonwool,	Contractor PIU	500 (for about 50 persons) (390 for PPEs, 110 for first aid kit)	Number of incidents/ accidents	Incident/ accident report Routine inspection	Use of PPEs Contractors compliance	School premises	Weekly	PIU	200

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
		methylated spirit, forceps, bandage, dettol)									
9	Public Safety	Provide caution/warning signs at sensitive locations like road bends Use trained drivers	Contractor	See A6 above	Number of incidents/accidents	Incident/accident report Routine inspection	Contractors compliance Caution signs	Routes through community to the school	Every 2 weeks	School Management SSO, PIU	See A5 above
Sub total				2,700							900

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Operation and movement of equipment/ Demolition/ Rehabilitation works											
Environmental Impacts											
1	Air quality deterioration from exhaust fumes, hazardous gases (NOx,	Service equipment and machinery regularly	Contractor	300 (@ \$100/service x 3)	Gaseous pollutants: SO2,	In-situ Air Quality Measurement	FMEnv air pollutants	School premises	Every two months	OGMOE OGEPA	300

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
	CO, SOx, SPM, Oxides from machinery operations Climate Change: Green House Gas Emissions	Switch fuel from high- to low-carbon content fuels (where available) Turn off machines when not in use	Contractor	1200	NO2, CO2, CO, VOCs, H2S, TSP	Visual Observation VET/VES Report	permissible limit			ESO, PIU	
2	Open defecation by workers	Provide stationery toilets for workers to be handed over to the college afterwards/ Sensitise workers against open defecation	Contractor	2,500 (\$500 for Sensitization + \$2000 for construction)	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt PIU	Part of routine monitoring
3	Open defecation by students	Phase upgrade of toilet facilities (one at a time) Complete on time	Contractor	-	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt ESO, PIU	Part of routine monitoring
4	Soil compaction from movement of vehicles /Stationary vehicles and equipment	Create limit zones Minimize compaction during stockpiling by working the soil in the dry state Rip compacted areas to reduce runoff and re-vegetate where necessary	Contractor	500(procurement of caution signs)	Demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project site Equipment packing zones	Monthly	ESO, PIU OGEPA	200
5	Soil and groundwater contamination by oil spills, lubricants and other chemicals	Site oil and lubricants on an impervious base and should have drip pans Locate storage area far from boreholes, all containers should be clearly labeled	Contractor	300 (procurement of pans and lease of storage area)	Soil quality parameters Compliance with fuel storage procedures	In situ/ laboratory analysis Visual/ Observation	FME nv soil pollutants permissible limit	School premises	Twice during construction	ESO, PIU OGEPA	400

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
6	Vibrations to existing buildings and subsequent building collapse if not attended to	Install noise barrier/ acoustic shield. Limit operation to specific areas where work is carried out	Contractor	300	Presence of affected buildings	Site inspection	Machinery fitted with acoustic shield	School premises	Monthly	School Mgt. ESO, PIU	Captured as part of periodic monitoring activities
7	Pollution from presence of construction waste on-site	Implement site-specific waste management plan (annex 7) Liaise with OGEPA for effective waste management and safe handling/disposal of waste	Contractor	500	Presence of construction waste on-site	Site inspection	Compliance with waste management plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	1,000
Removal of asbestos ceiling											
Environmental Impacts											
8	Health risk: Inhalation of Asbestos fibres which is toxic	Use of appropriate PPEs when removing asbestos ceiling (see asbestos mgt. plan, annex 7)	Contractor	800	Gaseous emissions: asbestos dust/ particulate matter	In-situ air quality test	FME nv air pollutants permissible limit	School premises	Weekly	ESO, PIU OGEPA OGMOE	500
9	Health risk: Asbestos waste on-site which is toxic	Implement site-specific Asbestos management plan Liaise with OGEPA for effective management and safe disposal of hazardous waste	Contractor PIU	300	Presence of asbestos ceiling on-site	Site inspection	Compliance with the asbestos mgt. plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	300

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Operation and movement of equipment/ Demolition/ Rehabilitation works											
Social Impacts											
10	Loss of travel time due to heavy concentration of haulage vehicles on and off the project site	See A6	Contractor	300	No of complaints received within the project area	Consultations	Traffic signs Contractors compliance	Routes through community to the sites	Weekly	School Management SSO, PIU	Part of routine monitoring
11	Grievances and negative perception by community members	Conduct stakeholders consultation with the host community at every phase of the project	School Management PIU	400 (@ \$134/consultation x 3)	No of complaints by community persons	Consultations Review grievance log	Minimal number of reported cases	Host community	Every 2 weeks	PIU	1,000
12	Disturbance of school activities from civil works	Adopt Phased rehabilitation: Lectures should be moved to other classrooms where works hasn't commenced. Most civil works should take place during holidays, weekends and after school hours	Contractor	-	No of complaints by school users	Consultations Review grievance log	Minimal number of reported cases	School premises	Every 2 weeks	School Management SSO, PIU	Part of routine monitoring
13	Respiratory infections from air contamination by exhaust fumes and dust	Regular sprinkling of water during construction works. Distribute face masks to PAPs	Contractor	500	Prevalence of respiratory infections reported in the school	Rapid health survey	Availability of face masks on site	School premises	Weekly	School Mgt. PIU Primary Health Workers	300

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
14	Labor influx ³ : Increase in spread of STDs/STIs in project area	Conduct awareness campaign on sexual diseases, and distribution of male and female condoms in conjunction with the PIU	Contractor	500	Level of Awareness and Education No of new STI cases	Rapid health survey	Level of awareness on preventive measures. % of reported STI/ STD cases	Project area of influence Health care facilities	Twice during Construction	SSO, PIU Primary Health Care Workers	200
15	Labor Influx: Potential risk of Sexual Exploitation and Abuse (SEA)/ Gender Based Violence (GBV)	All contractors workers to sign Code of Conduct (CoC) Sensitize workers on zero tolerance for sexual integration with students/ community School Mgt. and Parents Teachers Association (PTA) to sensitise students on safety habits, zero sexual integration with contractors and reporting mechanism for incidents Community leaders/ women group/youth group to sensitise the community on appropriate conduct with contractors	Contractor School Management	(part of OHS training by contractor and routine PTA meeting by school management)	Stakeholders concerns on risk of GBV	Consultations GBV Incident Report	Signed CoCs with the PIU Conduct of sensitization campaigns	School premises Host community	Twice during Construction	SSO, PIU	300
16	Cultural integration may be affected by foreigners who do not understand the culture	School management to sensitize contractor workers on the cultures of the project area (dos and don'ts, festivals etc.)	School Management	-	No of complaints from the host community	Consultation Incident Report	Conduct of sensitization campaigns	Host community	One-off	PIU	-

³ It is expected as part of minimizing labour influx that the contractor recruits local labour for the rehabilitation activities. However, the contractor is also expected to come along with their skilled staff (minimum of 15 persons) to oversee the project execution.

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
17	Conflicts between contractors, school, communities	Good work enforcement program Grievance Redress Mechanism Regular consultations	Contractor Grievance Redress Committee (GRC)	200	No of complaints received	Consultation Review Grievance redress Log	No of cases handled by the GRC	School premises Project area of influence	Continuous	Grievance Redress Committee	800
18	Increase demand on existing community health and sanitation infrastructure due to influx of temporary workers	Provide all basic amenities (water, sanitation etc to workers)	Contractor	1,500	Amenities in workers camp/ project site	Visual observation	Availability of all essential amenities in workers' camp	Workers campsite Host community	Monthly	ESO, PIU SSO, PIU	Part of routine monitoring
19	Vehicular or on-site accident	Prepare and implement a Community Affairs, Safety, Health, Environment and Security (CASHES) manual, to coordinate OHS issues during the construction phase.	Contractor	300	No of reported accidents	Reporting and feedback mechanism Accident Report	Zero/ minimal accident reports	School premises Host community	Continuous	ESO, PIU SSO,PIU	200
20	Risk of occupational accidents, injuries and diseases	Implement project specific HSE Plan Provide and enforce usage of appropriate PPE.	Contractor	500	HSE Plan No of reported cases	Accident Report	Compliance with HSE Plan	School premises	Monthly	ESO, PIU SSO,PIU	200
Sub Total				10,700							5,700

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
Demobilization of equipment and construction materials from the school											
Environmental Impacts											
1	Soil and water contamination from oil/ lubricants	Cart away all spoils through the relevant authorities Clean out impact areas	Contractor	800	Oil Spillages, construction waste and spoilt equipment/parts	Site inspection	Good house keeping	School premises Workers Campsite	Quarterly	ESO, PIU	200
Operation and use of facilities											
2	Waste generation	Implement on-site waste management plan on a continuous basis	School Mgt	Part of yearly budget	Air, water and soil pollutants	In-situ air, water and soil sampling	Good waste management practice	School premises	As required	OGEPA	Part of annual budget
Demobilization of equipment and construction materials from the school											
Social Impacts											
3	Disruption in learning activities.	Limit demobilization activities to non-school periods	Contractor	-	No of complaints from school users	Interview	Stakeholders satisfaction with activity	School premises	As required during	School Mgt.	-
Operation and use of rehabilitated facilities											
Social Impacts											
4	Operation Failures of renovated facilities may cause frustration	Routine checks and maintenance in accordance to schedule Timely reporting and fixing of faults	School Management	Part of yearly budget	No of complaints of Equipment failure report	Inspection Satisfaction Survey amongst students/ teachers	Student/ teachers satisfaction level with new facilities	School premises	Quarterly	OGMOEST TVET Board	Part of yearly budget

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
5	Enhanced school infrastructure will increase enrolment demand beyond the capacity of the school	Proper documentation of minimum standards for enrolment including cut-off numbers	School Management PTA	Part of yearly budget	No of complaints received on subject matter	Review of school standards documentation Stakeholder Perception survey	Stakeholders perception about the school	Project area of influence	Every two years	OGMOEST TVET Board	Part of yearly budget
Sub Total				800							200
TOTAL				14,200							7,400

CHAPTER FIVE: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR GSTC IGBESA, ADO-ODO/OTA, OGUN STATE

The situational analysis of GSTC Igbesa is presented in this chapter including description of the project environment. The scope of works to be carried out, and a detailed ESMP table for mitigation and monitoring of potential negative impacts.

5.1 Project Description

The College was established in 1989 and is a state-owned Technical College under the management of the Ogun State Ministry for Education on 31.005 Hectares (12.65 acres) land as shown in figure 4. The school has a total of 1021 students and 25 admin staff. The school offers various courses including mechanical engineering, motor vehicle mechanics, electrical installation, computer craft,



Figure 4: Map of GSTC Igbesa

Most of the buildings (classrooms, workshops, administrative blocks, and toilets) are in deplorable state and in dire need of rehabilitation. there is also a need for minimal expansion to accommodate the number of students that use the facility. The plates below show pictures of the dilapidated structures in the school.



Plate 13: Asbestos Ceiling breakage



Plate 14: Uncompleted Building



The rehabilitation works will include:

- i. Site clearance - This will include minimal clearing of shrubs and grasses within the school compound to create clear paths for machinery to access the work sites;
- ii. Expansion of workshops within the Technical college premises;
- iii. Removal of asbestos ceilings/roofs, replacement of ceiling/reroofing - almost all the buildings within the school have asbestos ceiling which is a toxic material;
- iv. Painting of buildings within the school;
- v. Replacement of windows and doors in the buildings; and
- vi. Rehabilitation of toilet facilities – upgrade of existing facilities and provision of hygiene facilities

5.2 Project Location

The proposed rehabilitation works will be implemented within the Government Technical College Igbesa, which is located within Ado-Odo/Ota local government area of Ogun State. The local government was formed in 1989. The local government borders on metropolitan Lagos. It has an area of 878km² and a population of 526,565. The local government area is the second largest in Ogun state, with its headquarter situated in Ota. (Amy McKenna, <https://www.britannica.com/place/Igbesa>)

5.3 Description of Environmental Baseline Conditions

Environmental Parameter	Description
Soil and Vegetation	The soil in this part of the state is sandy and is developed over a deeply weathered layer of sedimentary rocks consisting of false bedded sandstones which underlies the area. The vegetation in this area is derived savannah.
Topography	The sediments are of lower cretaceous rocks or Abeokuta formation. The entire area is made up of an undulating surface drained mainly by Rori and Ayinbo rivers. The landform is that of eroded pediment plain with well incised valleys forming a trellis pattern.
Climate	Igbesa lies on the latitude 6 32' N and longitude 3 8' E in a deciduous derived savannah zone of Ogun state. The climate is sub humid tropical with a long-time annual rainfall.
Rainfall	Rainfall in the LGA shows variation within the months. The town experiences extreme seasonal variation in monthly rainfall. The rainy period lasts for 8-10months, while rainless period of the year lasts for 1.8months.
Air Quality	Studies show some parts of this local government experience air pollution as a result of the populated industries situated in the area, we also have the Ogun-Guangdong FTZ that has

	several operating enterprises. The air quality in the area is questionable because stringent environmental measures are not in place to control the pollution.
Noise Pollution	As a result of the industries located in this LGA, there are bound to be noise emanating from industrial activities, movement of heavy duty machines and equipment.

Climate data source: <https://en.climate-data.org/africa/nigeria/ogun/Igbesa/>

Field assessment for ESMP, OGSTEP, Feb 2019

5.4 Description of Socio-economic baseline Conditions

Host Community	Igbesa kingdom is located in Ado-Odo/Ota, LGA of Ogun state; the kingdom was created about 800 years. The town is been ruled by the Oloja Ekun of Igbesa Kingdom, who is the traditional head and the town union leader. It has about 75 villages with 7 beaded crown Bales and 200 chiefs. The people of this town are the Aworis. The town has an estimated population of about 45,000 people. Igbesa is about 8miles west of the city of Lagos.
Urbanisation	The town is a destination point for foreign investors because one of the largest free trade zones in West Africa is located in the town. The Ogun-Guangdong FTZ has attracted numerous investors and to date it boasts of 42 enterprises already registered. While some are already functional, others are expanding the nature of their operations to meet new developments and challenges. The federal government is working closely with China to grow the capabilities of local manufacturers and entrepreneurs to produce quality homemade goods for the local market. In no time more people (skilled and unskilled) will tend to migrate into the community in search for employment opportunities and means of livelihood, as the town will be a major manufacturing hub servicing West Africa and beyond.
Transportation	The mode transportation in this community is mainly by road (cars, motorcycles and tricycles) and water (speed boats, ferries, etc.)
Agriculture	Igbesa is a small agricultural hub, with a few large agricultural businesses. The economic trees in this community are cocoa, palm tree, while cashew, cassava, plantain forms bulk of the cash crops cultivated in the town. Efinrin, alligator pepper are found to be medicinal; goats, cows, dogs, cats are the predominant animals in this community.
Education and Educational Facilities	There are few educational establishments situated in the town, like Crawford University (a private university), Ogun State Institute of Technology (OGITECH), technical college, 5 public secondary schools with numerous privately owned primary and secondary schools.
Tribes and Ethnic composition	The town is populated mainly by the Awori people, a subset of the Yorubas and the original inhabitants of the area. Other ethnic settlers like, Eguns, and Yewas also live here.
Leadership Pattern and Political process	The traditional head of the town is the kabiyesi Oloja Ekun of Igbesa kingdom, who acts solely as the traditional and the town union head. There are many leadership forums in the town like the youth assembly, education committee of the community, women group etc.
Occupation	The people of this town are known to be farmers, artisans (welders, carpenters, bricklayers, electricians etc.), factory workers etc. They have 5 local markets that form the economic basis of their town.
Religious affiliations	They have many cultural heritage practices. Most people in the community are Christians and Muslims, while some are traditional. According to the belief of the people there are

	sacred shrines that are of importance to them in the community. The people of this community celebrate Egungun and Gelede festival yearly.
Amenities in the Community:	The town has a primary health care centre and a general hospital, although they are not well equipped. The road networks within the community and roads linking the community to other towns are in a deplorable state. No portable water for some of the residents, the town is connected to the national grid and relies solely on the power from Power holding Company of Nigeria for their electricity supply. Land ownership system in this town can be termed inheritance and family system of ownership. Grievance redress mechanism is mainly by family settlement.

Source: Socio-economic field assessment for ESMP, OGSTEP, Feb 2019

5.6 Environmental and Social Mitigation and Monitoring Programme

The environmental and social action plans including parameters to be measured, methods of measurement, location of measurement, performance indicators (targets or acceptance criteria) that can be tracked over defined time periods, budget estimates and responsibilities for monitoring is presented in Table 5 below in accordance to the project phases.

Table 5: Environmental and Social Impact Mitigation and Monitoring Plan for GSTC Igbesa

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
1	Air quality deterioration: fugitive dust, exhaust fumes, GHGs	Sprinkle water via spraying devices to limit dusts.	Contractor	200 (@ \$0.15/liter x 900 liters x twice)	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP VET/VES Report	In-situ Air Quality Measurement Visual Observation	FMEnv air pollutants permissible limit	2-3km radius of project area	Weekly	OGMOE, OGEPA, Environment Safeguard Officer (ESO) PIU	200
		Service vehicles; undergo vehicle emission testing (VET) and vehicle exhaust screening (VES)	Contractor	200 (@ \$100/service x 2)			FMEnv air pollutants permissible limit	On-site and nearby community	Every two months		
2	Loss of vegetation from site clearing	Clear only areas that are necessary Revegetate unused cleared areas	Contractor	550	Loss of vegetation	Visual observation	Contractors compliance	Within the school	One off	ESO, PIU	Part of routine monitoring
3	Soil erosion and soil compaction due to movement stacking of heavy-duty equipment	Limit zone of vehicle and equipment weight impacts (designate an area for parking and stacking equipment)	Contractor	100	Visible demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	100
	Soil pollution from leakages of stacked equipment and chemical substances into soil.	Fasten loose parts (bolts, nuts); Install impermeable surface at the limit zone to contain potential leakages	Contractor	200	Installation of impermeable platform at limit zone.	Soil quality test Site inspection	FMEnv soil pollutants permissible limit	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	
4	Noise	Transport equipment during holidays/after school hours (3.00pm)/ weekends	Contractor	-	Number and frequency of	In-situ measurement of noise level	Noise level not to exceed 90dB(A) for 8	2-3Km radius of project site	Weekly	ESO, PIU	100

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
					complaints in project area		hours working period			OGEPA	
5	Displacement of soil fauna and damage to flora.	Limit vegetation clearing to minimum area required to create access path	Contractor	-	Radius of cleared path	Visual Observation	Contractors compliance	School premises	One-off	School Mgt. ESO, PIU	-
6	Clearing of vegetation to create perimeter for fence	Revegetate cleared areas Replant in other areas in the school	Contractor	200	Revegetated areas	Visual Observation	Contractors compliance	School premises	One off	School Mgt. ESO, PIU	-
Social Impacts											
7	Contractor workers may be disturbed by youth group	Consult with community leaders/youth groups prior to mobilisation to site	Contractor	1,000	No of complaints by contractor workers	Grievance log	Absence of report on community disturbance	Host community	Every 2 weeks	PIU	1,000
8	Noise	Retrofit equipment with sound proof	Contractor	200	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level below 90dB(A)	2-3Km radius of project site	Weekly	SSO, PIU OGEPA	See A4
9	Occupational health risks	Provide PPE (hardhat, hand gloves, boots, nose masks etc.) to workers; Educate site workers; Provide first aid onsite (Scissors, Plaster, Iodine, Gentia-violent, razorblade, cotton-wool, methylated spirit, forceps, bandage, dettol)	Contractor	200 (for about 30 persons) (156 for PPEs, 44 for first aid kit)	Number of incidents/accidents	Incident/accident report Routine inspection	Use of PPEs Contractors compliance	School premises	Weekly	PIU	100

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
10	Public Safety	Provide caution/warning signs at sensitive locations like road bends Use trained drivers	Contractor	200 (procurement of caution signs)	Number of incidents/accidents	Incident/accident report Routine inspection	Contractors compliance Caution signs	Routes through community to the school	Every 2 weeks	School management SSO, PIU	See A5 above
Sub total				3,050							1,500

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Operation and movement of equipment/ Expansion/Rehabilitation works											
Environmental Impacts											
1	Air quality deterioration from exhaust fumes, hazardous gases (NOx, CO, SOx, SPM,)), Oxides from machinery operations Climate Change: Green House Gas Emissions	Service equipment and machinery regularly	Contractor	200 (@ \$100/service x 2)	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP	In-situ Air Quality Measurement	FMEnv air pollutants permissible limit	School premises	Every two months	OGMOE OG EPA ESO, PIU	300
		Switch fuel from high- to low-carbon content fuels (where available) Turn off machines when not in use	Contractor	600		Visual Observation VET/VES Report					

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
2	Open defecation by workers	Provide stationery toilets for workers to be handed over to the college afterwards/ Sensitise workers against open defecation	Contractor	1,500(\$300 for Sensitization + \$1200 for construction)	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt PIU	Part of routine monitoring
3	Open defecation by students	Phase upgrade of toilet facilities (one at a time) Complete on time	Contractor	-	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt ESO, PIU	Part of routine monitoring
4	Soil compaction from movement of vehicles /Stationary vehicles and equipment	Create limit zones Minimize compaction during stockpiling by working the soil in the dry state Rip compacted areas to reduce runoff and re-vegetate where necessary	Contractor	300 (procurement of caution signs)	Demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project site Equipment packing zones	Monthly	ESO, PIU OGEPA	200
5	Soil and groundwater contamination by oil spills, lubricants and other chemicals	Site oil and lubricants on an impervious base and should have drip pans Locate storage area far from boreholes, all containers should be clearly labeled	Contractor	300 (procurement of pans and lease of storage area)	Soil quality parameters Compliance with fuel storage procedures	In situ/ laboratory analysis Visual/ Observation	FMEEnv soil pollutants permissible limit	School premises	Twice during construction	ESO, PIU OGEPA	400
6	Pollution from presence of construction waste on-site	Implement site-specific waste management plan (annex 7) Liaise with OGEPA for effective waste management and safe handling/disposal of waste	Contractor	500	Presence of construction waste on-site	Site inspection	Compliance with waste management plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	1,000

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Removal of asbestos ceiling											
Environmental Impacts											
7	Health risk: Inhalation of Asbestos fibres which is toxic	Use of appropriate PPEs when removing asbestos ceiling (see asbestos mgt. plan, annex 6)	Contractor	500	Gaseous emissions: asbestos dust/particulate matter	In-situ air quality test	FME nv air pollutants permissible limit	School premises	Weekly	ESO, PIU OGEPA OGMOE	500
8	Health risk: Asbestos waste on-site which is toxic	Implement site-specific asbestos management plan Liaise with OGEPA for effective management and safe disposal of hazardous waste	Contractor PIU	300	Presence of asbestos ceiling on-site	Site inspection	Compliance with the asbestos mgt. plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	300
Operation and movement of equipment/ Demolition/ Rehabilitation works											
Social Impacts											
9	Grievances and negative perception by community members	Conduct stakeholders consultation with the host community at every phase of the project	School Management PIU	400 (@ \$134/consultation x 3)	No of complaints by community persons	Consultations Review grievance log	Minimal number of reported cases	Host community	Every 2 weeks	PIU	1,000
10	Disturbance of school activities from civil works	Adopt Phased rehabilitation: Lectures should be moved to other classrooms where works hasn't commenced. Most civil works should take place during holidays, weekends and after school hours	Contractor	-	No of complaints by school users	Consultations Review grievance log	Minimal number of reported cases	School premises	Every 2 weeks	School Management SSO, PIU	Part of routine monitoring

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
11	Respiratory infections from air contamination by exhaust fumes and dust	Regular sprinkling of water during construction works. Distribute face masks to PAPs	Contractor	200	Prevalence of respiratory infections reported in the school	Rapid health survey	Availability of face masks on site	School premises	Weekly	School Mgt. PIU Primary Health Workers	300
12	Labor influx ⁴ : Increase in spread of STDs/STIs in project area	Conduct awareness campaign on sexual diseases, and distribution of male and female condoms in conjunction with the PIU	Contractor	500	Level of awareness and education No of new STI cases	Rapid health survey	Level of awareness on preventive measures. % of reported STI/ STD cases	Project area of influence Health care facilities	Twice during Construction	SSO, PIU Primary Health Care Workers	200
13	Labor Influx: Potential risk of Sexual Exploitation and Abuse (SEA)/ Gender Based Violence (GBV)	All contractors workers to sign Code of Conduct (CoC) Sensitize workers on zero tolerance for sexual integration with students/ community School Mgt. and Parents Teachers Association (PTA) to sensitise students on safety habits, zero sexual integration with contractors and reporting mechanism for incidents Community leaders/ women group/youth group to sensitise the community on appropriate conduct with contractors	Contractor School Management	(part of OHS training by contractor and routine PTA meeting by school management)	Stakeholders concerns on risk of GBV	Consultations GBV Incident Report	Signed CoCs with the PIU Conduct of sensitization campaigns	School premises Host community	Twice during Construction	SSO, PIU	300

⁴ It is expected as part of minimizing labour influx that the contractor recruits local labour for the rehabilitation activities. However, the contractor is also expected to come along with their skilled staff (minimum of 15 persons) to oversee the project execution.

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
14	Cultural integration may be affected by foreigners who do not understand the culture	School management to sensitize contractor workers on the cultures of the project area (dos and don'ts, festivals etc.)	School Management	-	No of complaints from the host community	Consultation Incident Report	Conduct of sensitization campaigns	Host community	One-off	PIU	-
15	Conflicts between contractors, school, communities	Good work enforcement program Grievance Redress Mechanism Regular consultations	Contractor Grievance Redress Committee (GRC)	300	No of complaints received	Consultation Review Grievance redress Log	No of cases handled by the GRC	School premises Project area of influence	Continuous	Grievance Redress Committee	800
16	Increase demand on existing community health and sanitation infrastructure due to influx of temporary workers	Provide all basic amenities (water, sanitation etc to workers)	Contractor	600	Amenities in workers camp/ project site	Visual observation	Availability of all essential amenities in workers' camp	Workers campsite Host community	Monthly	ESO, PIU SSO, PIU	Part of routine monitoring
17	Vehicular or on-site accident	Prepare and implement a Community Affairs, Safety, Health, Environment and Security (CASHES) manual, to coordinate OHS issues during the construction phase.	Contractor	300	No of reported accidents	Reporting and feedback mechanism Accident Report	Zero/ minimal accident reports	School premises Host community	Continuous	ESO, PIU SSO, PIU	200
18	Risk of occupational accidents, injuries and diseases	Implement project specific HSE Plan Provide and enforce usage of appropriate PPE.	Contractor	300	HSE Plan No of reported cases	Accident Report	Compliance with HSE Plan	School premises	Monthly	ESO, PIU SSO, PIU	200
Sub Total				6,800							4,900

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
Demobilization of equipment and construction materials from the school											
Environmental Impacts											
1	Soil and water contamination from oil/ lubricants	Cart away all spoils through the relevant authorities Clean out impact areas	Contractor	300	Oil Spillages, construction waste and spoilt equipment/parts	Site inspection	Good house keeping	School premises Workers Campsite	Quarterly	ESO, PIU	200
Operation and use of facilities											
2	Waste generation	Implement on-site waste management plan on a continuous basis	School Mgt	Part of yearly budget	Air, water and soil pollutants	In-situ air, water and soil sampling	Good waste management practice	School premises	As required	OGEPA	Part of annual budget
Demobilization of equipment and construction materials from the school											
Social Impacts											
3	Disruption in learning activities.	Limit demobilization activities to non-school periods	Contractor	-	No of complaints from school users	Interview	Stakeholders satisfaction with activity	School premises	As required during	School Mgt.	-
Operation and use of rehabilitated facilities											
Social Impacts											
4	Operation Failures of renovated facilities may cause frustration	Routine checks and maintenance in accordance to schedule/ report faults timely reporting and fixing of faults	School Management	Part of yearly budget	No of complaints of Equipment failure report	Inspection/Satisfaction Survey	Satisfaction level with new facilities	School premises	Quarterly	OGMOEST TVET Board	Part of yearly budget
5	Increased enrolment demand beyond the capacity of the school	Proper documentation of minimum standards for	School Management PTA	Part of yearly budget	No of complaints received on subject matter	Stakeholder Perception survey	Stakeholders perception	Project area of influence	Every two years	OGMOEST TVET Board	Part of yearly budget

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
		enrolment including cut-off numbers					about the school				
Sub Total				300							200
TOTAL				10,150							6,800

CHAPTER SIX: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR GSTC ILARA REMO LGA, OGUN STATE

The situational analysis of GSTC Ilara Remo is presented in this chapter including description of the project environment. The scope of works to be carried out, and a detailed ESMP table for mitigation and monitoring of potential negative impacts.

6.1 Project Description

The College was established in 1989 and is a state-owned Technical College under the management of the Ogun State Ministry for Education on 90.501 hectares (217 acres) land as shown in figure 5. The school has a total of 252 students and 15 admin staff. It also has a male and female hostel. The buildings (classrooms, workshops, administrative blocks, and toilets) are in deplorable state and in dire need of rehabilitation. The hostel facility is no longer in use because it is inhabitable. The plates below show pictures of the dilapidated structures in the school.

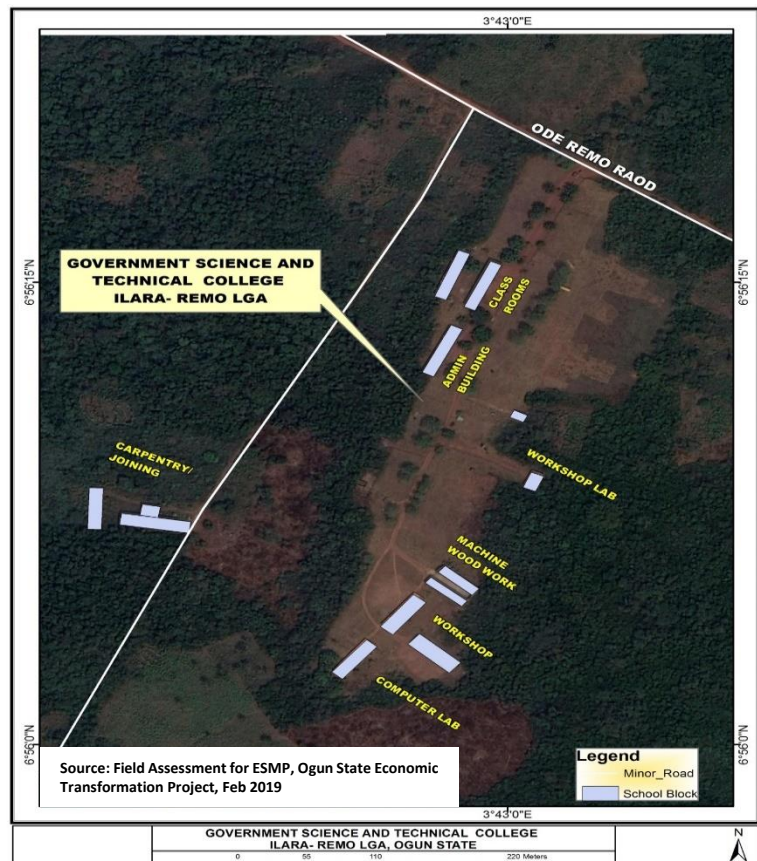


Figure 5: Map of GSTC Ilara Remo



Plate 15: Dilapidated Classroom



Plate 16: No perimeter fence, abandoned toilet facility

The rehabilitation works will include:

- I. site clearance - This will include clearing of shrubs and grasses within the school compound to create clear paths for machinery to access the work sites and also for the perimeter fence;
- II. removal of asbestos ceilings/roofs, replacement of ceiling/reroofing - almost all the buildings within the school have asbestos ceiling which is a toxic material.
- III. rehabilitation of hostels
- IV. painting of buildings within the school;
- V. replacement of windows and doors in the buildings;
- VI. rehabilitation of toilet facilities – upgrade of existing facilities and provision of hygiene facilities

The college is located in an isolated area in Remo North LGA

5.2 Project Location

Remo North Local government area was created out from Ikenne local government in 1996/ the LGA, the headquarters is located in Isara. It has an area of 199km² and a population of 59,911. It is bounded to the East by Ijebu North, to the South West Ikenne and Obafemi/Owode Local government, then to the North by Oyo State. The other towns in this local government are Isara, Ode-remo, orile-oko and Ipara. Remo North LGA is richly endowed with large mineral deposit which serves as raw materials for various manufacturing industries. (Amy McKenna, <https://www.britannica.com/place/Ilara-Remo>).

5.3 Description of Environmental Baseline Conditions

Environmental Parameter	Description
Soil and Vegetation	The soil in this part of the state is sandy and is developed over a deeply weathered layer of sedimentary rocks consisting of false bedded sandstones which underlies the area. The vegetation in this area is derived savannah.
Topography	The sediments are of lower cretaceous rocks or Abeokuta formation. The entire area is made up of an undulating surface drained mainly by Rori and Ayinbo rivers. The landform is that of eroded pediment plain with well incised valleys forming a trellis pattern.
Climate	Igbesa lies on the latitude 6 32' N and longitude 3 8' E in a deciduous derived savannah zone of Ogun state. The climate is sub humid tropical with a long-time annual rainfall.
Rainfall	Rainfall in the LGA shows variation within the months. The town experiences extreme seasonal variation in monthly rainfall. The rainy period lasts for 8-10months, while rainless period of the year lasts for 1.8months.
Air Quality	Studies show some parts of this local government experience air pollution as a result of the populated industries situated in the area, we also have the Ogun-Guangdong FTZ that has several operating enterprises. The air quality in the area is questionable because stringent environmental measures are not in place to control the pollution.
Noise Pollution	As a result of the industries located in this LGA, there are bound to be noise emanating from industrial activities, movement of heavy duty machines and equipment.

Climate data source: <https://en.climate-data.org/africa/nigeria/ogun/Ilara-Remo/>
(Field assessment for ESMP, OGSTEP, Feb 2019)

5.4 Description of Socio-economic baseline Conditions

Host Community	Ilara-Remo is located in Remo North Local government area of Ogun State. The people of this community migrated from Ile-Ife, in Osun state. Ilara-Remo's estimated population is 4,500. The people of this town are predominantly farmers, while some are artisans (carpenter, brick layers, electricians, etc.). The Oba is the traditional head of the
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community while the town union is headed by a chieftain (Lisa); the women group is headed by the iyalode of the community

Urbanisation	Ilara-Remo has enjoyed drive for commercial, political and cultural life; this has been a major influence on the town and surrounding towns. The town is undergoing a demographic transition, where people are living longer, and there has been a rapid change in population health due to changes in lifestyle mainly as a result of urbanization in the town. The town has grown phenomenally as result of the pace of industrialization.
Transportation	The mode of transportation in this community is mainly by road (cars, bikes, and keke Napep)
Agriculture	Agriculture is the main stay resources of the people's livelihood. It is in this fact regarded as the Food basket of Ogun State. Economic trees like cocoa, kolanut trees, while mango, yam, maize, pepper, banana, etc. forms the cash crops cultivated in the community. Orogbu tree is the medicinal plant that is profound in the community. Predominant animals in this community are rams, sheep, hens, etc. while snake is perceived to be the only wild animal found in the area.
Education and Educational Facilities	The community has a technical college, a community high school and a primary school, with inadequate educational facilities.
Ethnic composition	The inhabitants of this community are the Remo people, which include Isara remo, Iperu Remo, Ilara Remo and the Ikenne people.
Leadership Pattern	The Oba is the traditional head of the community while the town union is headed by a chieftain (Lisa), the women group is headed by the iyalode of the community. The community has several groups, categorized by age differences, they include amuludun Ilara Remo, egbe bobadara, egbe arowolo, egbe gbobaniyi and egbe tobase; all these groups are created for the development, progress, peace and unity of the community. The women group is also part of these groups and is fully active in community activities.
Occupation	The people of this community are mainly farmers, traders, crafts men and artisans; the community has Oja Oba Ilara that forms part of their economy.
Religious affiliations	The religion embraced by this community is the Christianity, Islam and traditional religion. Marriages are been held in church, traditional, court, and in the mosques according to the belief of the resident. Oro Agemo, Balufon, Eluku and Orisa are all festivals observed as part of cultural heritage in this community. Drinking of palmwine and eating of rodents are taboos attached to cultural beliefs in this community for indigenes but do not affect visitors.
Amenities in the Community:	The community has only one Primary healthcare centre that is located by Irolu road area of the community. There healthcare facility is plagued with inadequate facility and shortage of staff (nurses, ward attendants, doctors, etc. the road network within and outside the town is fairly good and the town is connected to the national grid for their electricity. The land tenure system commonly practiced is the inheritance and the family ownership, which are called idogan, ehinkuledi, owowu, egudu and akuro. Land use in this community is mainly for farming purpose.
Student Gender Assessment:	The school is comprised of a Junior School with classes JS1-3 and a College with Classes 1-3. The College which is the main concern for this ESMP has a total of 251 students: 223 in the college and 28 in the Junior School.

Source: Socio-economic field assessment for ESMP, OGSTEP, Feb 2019

5.5 Environmental and Social Mitigation and Monitoring Programme

The environmental and social action plans including parameters to be measured, methods of measurement, location of measurement, performance indicators (targets or acceptance criteria) that can be tracked over defined time periods, budget estimates and responsibilities for monitoring is presented in Table 6 below in accordance to the project phases.

Table 6: Environmental and Social Impact Mitigation and Monitoring Plan for G\$TC Ilara Remo

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
1	Air quality deterioration: fugitive dust, exhaust fumes, GHGs	Sprinkle water via spraying devices to limit dusts.	Contractor	200 (@ \$0.15/liter x 900 liters x twice)	Gaseous pollutants: SO2, NO2, CO2, CO,VOCs, H2S, TSP VET/VES Report	In-situ Air Quality Measurement Visual Observation	FMEnv air pollutants permissible limit	2-3km Radius of project area	Weekly	OGMOE, OGEPA, Environment Safeguard Officer (ESO) PIU	200
		Service vehicles; undergo vehicle emission testing (VET) and vehicle exhaust screening (VES)	Contractor	200 (@ \$100/service x 2)			FMEnv air pollutants permissible limit	On-site and nearby community	Every two months		
2	Loss of vegetation from site clearing	Clear only areas that are necessary Revegetate unused cleared areas	Contractor	550	Loss of vegetation	Visual observation	Contractors compliance	Within the school	One off	ESO,PIU	Part of routine monitoring
3	Soil erosion and soil compaction due to movement stacking of heavy-duty equipment	Limit zone of vehicle and equipment weight impacts (designate an area for parking and stacking equipment)	Contractor	100	Visible demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	100
	Soil pollution from leakages of stacked equipment and chemical substances into soil.	Fasten loose parts (bolts, nuts); Install impermeable surface at the limit zone to contain potential leakages	Contractor	200	Installation of impermeable platform at limit zone.	Soil quality test Site inspection	FMEnv soil pollutants permissible limit	Project camp sites and equipment packing zones	Monthly	ESO,PIU OGEPA	
4	Noise	Transport equipment during holidays/after school hours (3.00pm)/ weekends	Contractor	-	Number and frequency of	In-situ measurement of noise level	Noise level not to exceed 90dB(A) for 8	2-3Km radius of project site	Weekly	ESO,PIU	100

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
					complaints in project area		hours working period			OGEPA	
5	Displacement of soil fauna and damage to flora.	Limit vegetation clearing to minimum area required to create access path	Contractor	-	Radius of cleared path	Visual Observation	Contractors compliance	School premises	One-off	School Mgt. ESO, PIU	-
6	Clearing of vegetation to create perimeter for fence	Revegetate cleared areas Replant in other areas in the school	Contractor	200	Revegetated areas	Visual Observation	Contractors compliance	School premises	One off	School Mgt. ESO, PIU	-
Social Impacts											
7	Noise	Retrofit equipment with sound proof	Contractor	200	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level below 90dB(A)	2-3Km radius of project site	Weekly	SSO, PIU OGEPA	See A4
8	Occupational health risks	Provide PPE to workers; Educate site workers; Provide first aid onsite (Scissors, Plaster, Iodine, Gentia-violent, razorblade, cottonwool, methylated spirit, forceps, bandage, dettol)	Contractor PIU	200 (for about 30 persons) (156 for PPEs, 44 for first aid box)	Number of incidents/accidents	Incident/accident report Routine inspection	Use of PPEs Contractors compliance	School premises	Weekly	PIU	100
9	Public Safety	Provide caution/warning signs at sensitive locations like road bends Use trained drivers	Contractor	200 (procurement of caution signs)	Number of incidents/accidents	Incident/accident report Routine inspection	Contractors compliance Caution signs	Routes through community to the school	Every 2 weeks	School management SSO, PIU	See above A5

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
Sub total				2,050							500

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Operation and movement of equipment/ Reconstruction/Rehabilitation works											
Environmental Impacts											
1	Air quality deterioration from exhaust fumes, hazardous gases (NOx, CO, SOx, SPM,), Oxides from machinery operations Climate Change: Green House Gas Emissions	Service equipment and machinery regularly Switch fuel from high- to low-carbon content fuels (where available) Turn off machines when not in use	Contractor Contractor	200 (@ \$100/service x 2) 600	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP	In-situ Air Quality Measurement Visual Observation VET/VES Report	FMEnv air pollutants permissible limit	School premises	Every two months	OGMOE OGEPA ESO, PIU	300
2	Open defecation by workers	Provide stationery toilets for workers to be handed over to the college afterwards/ Sensitise workers against open defecation	Contractor	1,500(\$300 for Sensitization + \$1200 for		Citing of faecal waste within the school					

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
				construction)							
3	Open defecation by students	Phase upgrade of toilet facilities (one at a time) Complete on time	Contractor	-	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt ESO, PIU	Part of routine monitoring
4	Soil compaction from movement of vehicles /Stationary vehicles and equipment	Create limit zones Minimize compaction during stockpiling by working the soil in the dry state Rip compacted areas to reduce runoff and re-vegetate where necessary	Contractor	300 (procurement of caution signs)	Demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project site Equipment packing zones	Monthly	ESO, PIU OGEPA	200
5	Soil and groundwater contamination by oil spills, lubricants and other chemicals	Site oil and lubricants on an impervious base and should have drip pans Locate storage area far from boreholes, all containers should be clearly labelled	Contractor	300 (procurement of pans and lease of storage area)	Soil quality parameters Compliance with fuel storage procedures	In situ/ laboratory analysis Visual/ Observation	FME nv soil pollutants permissible limit	School premises	Twice during construction	ESO, PIU OGEPA	400
6	Pollution from presence of construction waste on-site	Implement site-specific waste management plan (annex 7) Liaise with OGEPA for effective waste management and safe handling/disposal of waste	Contractor	500	Presence of construction waste on-site	Site inspection	Compliance with waste management plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	1,000

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Removal of asbestos ceiling											
Environmental Impacts											
7	Health risk: Inhalation of Asbestos fibres which is toxic	Use of appropriate PPEs (hard hat, hand gloves, nose masks, overall etc.) when removing asbestos ceiling (see asbestos mgt. plan, annex 6)	Contractor	200 (procurement for about 30 persons)	Gaseous emissions: asbestos dust/particulate matter	In-situ air quality test	FMEnv air pollutants permissible limit	School premises	Weekly	ESO, PIU OGEPA OGMOE	500
8	Health risk: Asbestos waste on-site which is toxic	Implement site-specific Asbestos management plan Liaise with OGEPA for effective management and safe disposal of hazardous waste	Contractor PIU	300 (see management plan)	Presence of asbestos ceiling on-site	Site inspection	Compliance with the asbestos mgt. plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	300
Operation and movement of equipment/ Demolition/ Rehabilitation works											
Social Impacts											
9	Disturbance of school activities from civil works	Adopt Phased rehabilitation: Lectures should be moved to other classrooms where works hasn't commenced. Most civil works should take place during holidays, weekends and after school hours	Contractor	-	No of complaints by school users	Consultations Review grievance log	Minimal number of reported cases	School premises	Every 2 weeks	School Management SSO, PIU	Part of routine monitoring
10	Respiratory infections from air contamination by exhaust fumes and dust	Regular sprinkling of water during construction works. Distribute face masks to PAPs	Contractor	200 (@ \$0.15/liter x 900 liters x twice)	Prevalence of respiratory infections reported in the school	Rapid health survey	Availability of face masks on site	School premises	Weekly	School Mgt. PIU Primary Health Workers	300

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
11	Labor influx ⁵ : Increase in spread of STDs/STIs in project area	Conduct awareness campaign on sexual diseases, and distribution of male and female condoms in conjunction with the PIU	Contractor	300	Level of Awareness and Education No of new STI cases	Rapid health survey	Level of awareness on preventive measures. % of reported STI/ STD cases	Project area of influence Health care facilities	Twice during Construction	SSO, PIU Primary Health Care Workers	200
12	Labor Influx: Potential risk of Sexual Exploitation and Abuse (SEA)/ Gender Based Violence (GBV)	All contractors workers to sign Code of Conduct (CoC) Sensitize workers on zero tolerance for sexual integration with students/ community School Mgt. and Parents Teachers Association (PTA) to sensitise students on safety habits, zero sexual integration with contractors and reporting mechanism for incidents Community leaders/ women group/youth group to sensitise the community on appropriate conduct with contractors	Contractor School Management	(part of OHS training by contractor and routine PTA meeting by school management)	Stakeholders concerns on risk of GBV	Consultations GBV Incident Report	Signed CoCs with the PIU Conduct of sensitization campaigns	School Premises Host community	Twice during Construction	SSO, PIU	300
13	Cultural integration may be affected by foreigners who do not understand the culture	School management to sensitize contractor workers on the cultures of the project area (dos and don'ts, festivals etc.)	School Management	(part of routine PTA meeting by school management)	No of complaints from the host community	Consultation Incident Report	Conduct of sensitization campaigns	Host community	One-off	PIU	-

⁵ It is expected as part of minimizing labour influx that the contractor recruits local labour for the rehabilitation activities. However, the contractor is also expected to come along with their skilled staff (minimum of 15 persons) to oversee the project execution.

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
14	Conflicts between contractors, school, communities	Good work enforcement program Grievance Redress Mechanism Regular consultations	Contractor Grievance Redress Committee (GRC)	300 (for consultation logistics)	No of complaints received	Consultation Review Grievance redress Log	No of cases handled by the GRC	School premises Project area of influence	Continuous	Grievance Redress Committee	800
15	Increase demand on existing community health and sanitation infrastructure due to influx of temporary workers	Provide all basic amenities (water, sanitation etc to workers)	Contractor	600	Amenities in workers camp/ project site	Visual observation	Availability of all essential amenities in workers' camp	Workers campsite Host community	Monthly	ESO, PIU SSO, PIU	Part of routine monitoring
16	Vehicular or on-site accident	Prepare and implement a Community Affairs, Safety, Health, Environment and Security (CASHES) manual, to coordinate OHS issues during the construction phase.	Contractor	300	No of reported accidents	Reporting and feedback mechanism Accident Report	Zero/ minimal accident reports	School premises Host community	Continuous	ESO, PIU SSO, PIU	200
17	Risk of occupational accidents, injuries and diseases	Implement project specific HSE Plan Provide and enforce usage of appropriate PPE.	Contractor	300	HSE Plan No of reported cases	Accident Report	Compliance with HSE Plan	School premises	Monthly	ESO, PIU SSO, PIU	200
Sub Total				6,300							4,900

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
Demobilization of equipment and construction materials from the school											
Environmental Impacts											
1	Soil and water contamination from oil/ lubricants	Cart away all spoils through the relevant authorities Clean out impact areas	Contractor	200	Oil Spillages, construction waste and spoilt equipment/parts	Site inspection	Good house keeping	School premises Workers Campsite	Quarterly	ESO, PIU	200
Operation and use of facilities											
2	Waste generation	Implement on-site waste management plan on a continuous basis	School Mgt	Part of yearly budget	Air, water and soil pollutants	In-situ air, water and soil sampling	Good waste management practice	School premises	As required	OGEPA	Part of annual budget
Demobilization of equipment and construction materials from the school											
Social Impacts											
3	Disruption in learning activities.	Limit demobilization activities to non-school periods	Contractor	-	No of complaints from school users	Interview	Stakeholders satisfaction with activity	School premises	As required during	School Mgt.	-
Operation and use of rehabilitated facilities											
Social Impacts											
4	Operation Failures of renovated facilities may cause frustration	Routine checks and maintenance in accordance to schedule Timely reporting and fixing of faults	School Management	Part of yearly budget	No of complaints of Equipment failure report	Inspection Satisfaction Survey amongst students/ teachers	Student/ teachers satisfaction level with new facilities	School premises	Quarterly	OGMOEST TVET Board	Part of yearly budget

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
5	Enhanced school infrastructure will increase enrolment demand beyond the capacity of the school	Proper documentation of minimum standards for enrolment including cut-off numbers	School Management PTA	Part of yearly budget	No of complaints received on subject matter	Review of school standards documentation Stakeholder Perception survey	Stakeholders perception about the school	Project area of influence	Every two years	OGMOEST TVET Board	Part of yearly budget
Sub Total				200							200
TOTAL				8,500							5,400

CHAPTER SEVEN: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR GSTC IDI-ABA ABEOKUTA SOUTH LGA, OGUN

The situational analysis of GSTC Idi-Aba is presented in this chapter including description of the project environment. The scope of works to be carried out, and a detailed ESMP table for mitigation and monitoring of potential negative impacts.

7.1 Project Description

The College was established in 1979 and it is a state-owned Technical College under the management of the Ogun State Ministry for Education on 54.1399 Hectares) land as shown in figure 8. The school has a total of 723 students and 53 admin staff. There is a female hostel. There is a training institute with about 5 newly constructed facilities within the school compound. Most of the school buildings are more in need of reconstruction than just rehabilitation. Some parts of buildings are structurally defective, visible cracks, dented floors, falling roofs etc. The hostel is also in bad condition and needs to be rehabilitated and expanded. The state of sanitation facility in the school is very poor with abandoned pit toilets.

A potential development concern is the notable presence of new buildings belonging to a Training Institute within the premises of the Technical College, with the possibility for future expansion, thus relegating the status of the TC. The precedence of Government demolishing existing dilapidated buildings belonging to the Technical College is also a concern. The plates below show pictures of the dilapidated structures in the school.



Figure 6: Map of GSTC Idi-Aba



Plate 17: Dangerously Cracked Floor



Plate 18: Figure 10: Cracks on wall



Plate 19: View of building belonging to the Technical College and another building belonging to the Technical Training Institute



Plate 20: Damaged and rotting asbestos ceiling, Cracks on the walls

The rehabilitation works will include:

- I. Site clearance - This will include clearing of shrubs and grasses within the school compound to create clear paths for machinery to access the work sites and also for the perimeter fence;
- II. Erection of perimeter fence;
- III. Removal of asbestos ceilings/roofs, replacement of ceiling/reroofing - almost all the buildings within the school have asbestos ceiling which is a toxic material;
- IV. Demolition and reconstruction of the buildings;
- V. Reflooring;
- VI. Upgrade of laboratories;
- VII. Painting of buildings within the school;
- VIII. Replacement of windows and doors in the buildings; and
- IX. Rehabilitation of toilet facilities – upgrade of existing facilities and provision of hygiene facilities

The college is located in Idi- Aba, Abeokuta South LGA.

7.2 Project Location

Abeokuta south local government occupies an area of 57,35sq km. The LGA is mainly inhabited by the Egbas who are predominantly of the Egba eku, Egba Aarin and Egba Agbeyin progeny. The LGA has other tribes living in the area because of it being the seat of the government of Ogun state. The estimated population of this LGA is 374,843 people. The tourist attractions in this local government area include; the first church in Nigeria- The cathedral of St. Peters, Ake; Alake's palace, Ake, has the first bible presented to the Alake of Egbaland in 1904. (Amy McKenna, <https://www.britannica.com/place/Idi-Aba>).

7.3 Description of Environmental Baseline Conditions

Environmental Parameter	Description
Soil and Vegetation	The soil type of this area is flat and sandy. The state's vegetation is divided into three distinctive zones, namely swampy vegetation with mangroves, where the state shares boundary with Atlantic Ocean, rainforest vegetation, and forest vegetation. Abeokuta is characterized by derived forest vegetation having been altered by anthropogenic activities
Topography	Abeokuta is one of the prominent urban settlements in the South-western Nigeria. The gneiss-migmatite complex is the most widespread rock formation within the study area. It comprises gneisses, quartzite, calcsilicate, biotite-hornblende schist and amphibolites. Abeokuta falls within the basement complex of the geological setting of south-western Nigeria.
Climate	The city has a tropical climate, the temperature here averages 27.1C, precipitation here averages 1238mm. the temperatures are highest on average in March, at around 29.1C, while at 25.1C on average, August is the coldest month of the year. Abeokuta experiences some seasonal variation in the perceived humidity. The muggier period of the year lasts for 11 months, during which the comfort level is muggy, oppressive at least 80% of the time
Rainfall	Rainfall in Abeokuta shows variation within the months. Abeokuta experiences extreme seasonal variation in monthly rainfall. The rainy period lasts for 8-10months, while rainless period of the year lasts for 1.8months.
Air Quality	The area is moderately clean. There are no sites of open dumpsites, no much cases of open burning, although there are some industries located in this city, the emission released are controlled. As a result of this the air quality is moderate and acceptable
Flora and Fauna	There has been alteration in the habitat and biodiversity in the town, due to human activities and disturbance on the natural habitat. Construction activities, site clearing has led to major loss of species diversity, including soil organisms, fungi, invertebrates. it has also lead to loss of food sources, fauna habitat and breeding grounds.

Climate data source: <https://en.climate-data.org/africa/nigeria/ogun/Idi-Aba/>

Field assessment for ESMP, OGSTEP, Feb 2019

7.4 Description of Socio-economic baseline Conditions

Host Community	Abeokuta south is both agricultural and commercial with a number of markets such as Sapon and the Gbangba markets providing shoppers with a plethora of commodities.
Urbanisation	Idi- Aba, Olobe is a ward in Abeokuta South LG that forms part of the administrative seat of government, it has enjoyed drive for commercial, political and cultural life, and this has been a major influence on the town, surrounding towns, and the state as a whole.
Transportation	The mode of transportation in this community is mainly by road (cars, bikes, and in some parts of the tricycle)
Agriculture	Economic trees found in the community are iroko, araba and Apa. Cocoa, coffee, cotton forms the cash crops cultivated in the community. The medicinal plants valued by the

	residents are efinrin, alligator pepper and oruwo. Animals predominant in the community are goats, sheep, dogs, sheep, cat etc.
Education and Educational Facilities	Abeokuta south is one of the Nigeria's most educationally advanced LGA, home to her best schools with outstanding tutors. The local area has educational institutions ranging from primary schools, secondary schools and a technical college.
Ethnic composition	The community is mainly inhabited by the Egbas who are predominantly of the Egba eku, Egba Aarin and Egba Agbeyin progeny. The LGA has other tribes living in the area because of it being the seat of the government of Ogun state.
Leadership Pattern and Political process	The Alake of Egba land is the paramount ruler of Abeokuta, he is ably supported by the sectional Obas. Been the seat of the state government, the administrative leadership of the town is vested in the State governor, speaker house of assembly, the local government chairman and the councillors who represents the interest of the people. Abeokuta south has a relatively good history of peaceful co-existence among its people, because it is a well-coordinated community that has high respect for native authority residual in the Obaship institution, this has played significant roles in native administration, peace and security including societal norm and values.
Occupation	The occupations of indigenes are pottery, tie & dye, public civil servants; there is also the presence of artisans (furniture, aluminum fixing, carpentry, welding, bricklaying, etc.) in the community. The town has the Sapon and the Gbangba markets that provide shoppers with a plethora of commodities and also forms part of their economy
Religious affiliations	The religion embraced by this community is the Christianity, Islam and traditional religion. Marriages are been held in church, traditional, court, and in the mosques according to the belief of the resident. The people of Abeokuta south celebrate egungun, igunuko and oro, which is a heritage.
Amenities in the Community:	The community has tarred roads scattered within the area. The tarring of these roads is mainly through direct labour by the works and housing department of the LG. The community is connected to the national grid for their electricity. There are hospitals and primary healthcare centres situated in the community. The Grievance redress mechanism is mainly by family settlement or by government intervention.

Source: Socio-economic field assessment for ESMP, OGSTEP, Feb 2019

7.5 Environmental and Social Mitigation and Monitoring Programme

The environmental and social action plans including parameters to be measured, methods of measurement, location of measurement, performance indicators (targets or acceptance criteria) that can be tracked over defined time periods, budget estimates and responsibilities for monitoring is presented in Table 7 below in accordance to the project phases.

Table 7: Environmental and Social Impact Mitigation and Monitoring Plan for G\$TC Idi-Aba

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
1	Air quality deterioration: fugitive dust, exhaust fumes, GHGs	Sprinkle water via spraying devices to limit dusts.	Contractor	200 (@ \$0.15/liter x 900 liters x twice)	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP VET/VES Report	In-situ Air Quality Measurement Visual Observation	FMEnv air pollutants permissible limit	2-3km Radius of project area	Weekly	OGMOE, OGEPA, Environment Safeguard Officer (ESO) PIU	200
		Service vehicles; undergo vehicle emission testing (VET) and vehicle exhaust screening (VES)	Contractor	350 (@ \$116.5/ser vice x 3)			FMEnv air pollutants permissible limit	On-site and nearby community	Every two months		
2	Soil erosion and soil compaction due to movement stacking of heavy-duty equipment	Limit zone of vehicle and equipment weight impacts (designate an area for parking and stacking equipment)	Contractor	100	Visible demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	300
	Soil pollution from leakages of stacked equipment and chemical substances into soil.	Fasten loose parts (bolts, nuts); Install impermeable surface at the limit zone to contain potential leakages	Contractor	200	Installation of impermeable platform at limit zone.	Soil quality test Site inspection	FMEnv soil pollutants permissible limit	Project camp sites and equipment packing zones	Monthly	ESO, PIU OGEPA	
3	Noise	Transport equipment during holidays/after school hours (3.00pm)/ weekends	Contractor	-	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level not to exceed 90dB(A) for 8 hours working period	2-3Km Radius of project site	Weekly	ESO, PIU OGEPA	200

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
4	Displacement of soil fauna and damage to flora.	Limit vegetation clearing to minimum area required to create access path	Contractor	-	Radius of cleared path	Visual Observation	Contractors compliance	School premises	One-off	School Mgt. ESO, PIU	-
Social Impacts											
5	Delay in travel time along the major road especially on market days.	Limit movement of equipment and machinery on market days (every 5 days)/ cultural/festival days Traffic signs/ control	Contractor	200	No of complaints received within the project area	Site visits and observation	Traffic signs Contractors compliance	Routes through community to the school	Weekly	School Management SSO, PIU	See A3
6	Noise	Retrofit equipment with sound proof	Contractor	500	Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level below 90dB(A)	2-3Km Radius of project site	Weekly	SSO, PIU OGEPA	See A3
7	Occupational health risks	Provide PPE (Hardhat, hand gloves, safety boots, nose masks etc.) to workers; Educate site workers; Provide first aid onsite (Scissors, Plaster, Iodine, Gentia-violent, razorblade, cottonwool, methylated spirit, forceps, bandage, dettol)	Contractor	500 (for about 45 persons) (390 for PPEs, 110 for first aid kit)	Number of incidents/ accidents	Incident/ accident report Routine inspection	Use of PPEs Contractors compliance	School premises	Weekly	PIU	200
8	Public Safety	Provide caution/warning signs at sensitive locations like road bends Use trained drivers	Contractor	See above A5	Number of incidents/ accidents	Incident/ accident report Routine inspection	Contractors compliance Caution signs	Routes through community to the school	Every 2 weeks	School Management SSO, PIU	See above A5

Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
A	PRE-CONSTRUCTION PHASE										
Site Clearing and Mobilization											
Environmental Impacts											
Sub total				1,850							900

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Operation and movement of equipment/ Demolition/ Rehabilitation works											
Environmental Impacts											
1	Air quality deterioration from exhaust fumes, hazardous gases (NOx, CO, SOx, SPM,), Oxides from machinery operations Climate Change: Green House Gas Emissions	Service equipment and machinery regularly Switch fuel from high- to low-carbon content fuels (where available) Turn off machines when not in use	Contractor Contractor	300 (@ \$100/service x 3) 1200	Gaseous pollutants: SO2, NO2, CO2, CO, VOCs, H2S, TSP	In-situ Air Quality Measurement Visual Observation VET/VES Report	FME _{env} air pollutants permissible limit	School premises	Every two months	OGMOE OG EPA ESO, PIU	300
2	Open defecation by workers	Provide stationery toilets for workers to be handed over to the college afterwards/ Sensitise workers against open defecation	Contractor	1,500 (\$300 for Sensitization + \$1200 for	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt PIU	Part of routine monitoring

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
				construction							
3	Open defecation by students	Phase upgrade of toilet facilities (one at a time) Complete on time	Contractor	-	Citing of faecal waste within the school	Visual observation	Absence of faecal waste on-site	School premises	Weekly	School Mgt ESO, PIU	Part of routine monitoring
4	Soil compaction from movement of vehicles /Stationary vehicles and equipment	Create limit zones Minimize compaction during stockpiling by working the soil in the dry state Rip compacted areas to reduce runoff and re-vegetate where necessary	Contractor	300 (procurement of caution signs)	Demarcation of vehicles and equipment limit zone	Visual observation Soil Compaction test	Contractors compliance	Project site Equipment packing zones	Monthly	ESO, PIU OGEPA	200
5	Soil and groundwater contamination by oil spills, lubricants and other chemicals	Site oil and lubricants on an impervious base and should have drip pans Locate storage area far from boreholes, all containers should be clearly labeled	Contractor	300 (procurement of pans and lease of storage area)	Soil quality parameters Compliance with fuel storage procedures	In situ/ laboratory analysis Visual/ Observation	FMEEnv soil pollutants permissible limit	School premises	Twice during construction	ESO, PIU OGEPA	400
6	Vibrations to existing buildings and subsequent building collapse if not attended to	Install noise barrier/ acoustic shield. Limit operation to specific areas where work is carried out	Contractor	300	Presence of affected buildings	Site inspection	Machinery fitted with acoustic shield	School premises	Monthly	School Mgt. ESO, PIU	Captured as part of periodic monitoring activities
7	Pollution from presence of demolition and construction waste on-site	Implement site-specific waste management plan (annex 7) Liaise with OGEPA for effective waste management and safe handling/disposal of waste	Contractor	500	Presence of construction waste on-site	Site inspection	Compliance with waste management plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	1,000

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
Removal of asbestos ceiling											
Environmental Impacts											
8	Health risk: Inhalation of Asbestos fibres which is toxic	Use of appropriate PPEs (hardhat, nose masks, hand gloves, overall etc.) when removing asbestos ceiling (see asbestos mgt. plan, annex 6)	Contractor	500 (procurement for about 45 persons)	Gaseous emissions: asbestos dust/ particulate matter	In-situ air quality test	FME nv air pollutants permissible limit	School premises	Weekly	ESO, PIU OGEPA OGMOE	500
9	Health risk: Asbestos waste on-site which is toxic	Implement site-specific Asbestos management plan Liaise with OGEPA for effective management and safe disposal of hazardous waste	Contractor	300	Presence of asbestos ceiling on-site	Site inspection	Compliance with the asbestos mgt. plan Good house keeping	School premises	Weekly	School Mgt. ESO, PIU OGEPA	300
Operation and movement of equipment/ Demolition/ Rehabilitation works											
Social Impacts											
10	Loss of travel time due to heavy concentration of haulage vehicles on and off the project site	See A5	Contractor	300	No of complaints received within the project area	Consultations	Traffic signs Contractors compliance	Routes through community to the sites	Weekly	School Management SSO, PIU	Part of routine monitoring
11	Grievances and negative perception by community members	Conduct stakeholders consultation with the host community at every phase of the project	School Management PIU	400 (@ \$134/consultation x 3)	No of complaints by community persons	Consultations Review grievance log	Minimal number of reported cases	Host community	Every 2 weeks	PIU	1,000
12	Disturbance of school activities from civil works	Adopt Phased rehabilitation: Lectures should be moved to other classrooms where works hasn't commenced.	Contractor	-	No of complaints by school users	Consultations Review grievance log	Minimal number of reported cases	School premises	Every 2 weeks	School Management SSO, PIU	Part of routine monitoring

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
		Most civil works should take place during holidays, weekends and after school hours									
13	Respiratory infections from air contamination by exhaust fumes and dust	Regular sprinkling of water during construction works. Distribute face masks to PAPs	Contractor	500 (@ \$0.15/liter x 1000 liters x twice)	Prevalence of respiratory infections reported in the school	Rapid health survey	Availability of face masks on site	School premises	Weekly	School Mgt. PIU Primary Health Workers	300
14	Labor influx ⁶ : Increase in spread of STDs/STIs in project area	Conduct awareness campaign on sexual diseases, and distribution of male and female condoms in conjunction with the PIU	Contractor	500 (logistics, preparation of fliers, purchase of condoms etc.)	Level of Awareness and Education No of new STI cases	Rapid health survey	Level of awareness on preventive measures. % of reported STI/ STD cases	Project area of influence Health care facilities	Twice during Construction	SSO, PIU Primary Health Care Workers	200
15	Labor Influx: Potential risk of Sexual Exploitation and Abuse (SEA)/ Gender Based Violence (GBV)	All contractors workers to sign Code of Conduct (CoC) Sensitize workers on zero tolerance for sexual integration with students/ community School Mgt. and Parents Teachers Association (PTA) to sensitise students on safety habits, zero sexual integration with contractors and reporting mechanism for incidents	Contractor School Management	(part of OHS training by contractor and routine PTA meeting by school management)	Stakeholders concerns on risk of GBV	Consultations GBV Incident Report	Signed CoCs with the PIU Conduct of sensitization campaigns	School Premises Host community	Twice during Construction	SSO, PIU	300

⁶ It is expected as part of minimizing labour influx that the contractor recruits local labour for the rehabilitation activities. However, the contractor is also expected to come along with their skilled staff (minimum of 15 persons) to oversee the project execution.

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
		Community leaders/ women group/youth group to sensitise the community on appropriate conduct with contractors									
16	Cultural integration may be affected by foreigners who do not understand the culture	School management to sensitize contractor workers on the cultures of the project area (dos and don'ts, festivals etc.)	School Management	-	No of complaints from the host community	Consultation Incident Report	Conduct of sensitization campaigns	Host community	One-off	PIU	-
17	Access restriction for contractors workers by restive group	Consult with community groups during all project phases	Contractor	1,000 (consultation logistics)	No of complaints from contractors workers	Consultation Incident Report	Absence of such cases in incident report	Host community	Prior to every phase	SSO, PIU	1,000
18	Conflicts between contractors, school, communities	Good work enforcement program Grievance Redress Mechanism Regular consultations	Contractor Grievance Redress Committee (GRC)	200	No of complaints received	Consultation Review Grievance redress Log	No of cases handled by the GRC	School Premises Project area of influence	Continuous	Grievance Redress Committee	800
19	Increase demand on existing community health and sanitation infrastructure due to influx of temporary workers	Provide all basic amenities (water, sanitation etc to workers)	Contractor	2,500	Amenities in workers camp/ project site	Visual observation	Availability of all essential amenities in workers' camp	Workers campsite Host community	Monthly	ESO, PIU SSO, PIU	Part of routine monitoring
20	Vehicular or on-site accident	Prepare and implement a Community Affairs, Safety, Health, Environment and Security (CASHES) manual, to coordinate OHS issues during the construction phase.	Contractor	300	No of reported accidents	Reporting and feedback mechanism Accident Report	Zero/ minimal accident reports	School premises Host community	Continuous	ESO, PIU SSO,PIU	200
21	Risk of occupational accidents, injuries and diseases	Implement project specific HSE Plan	Contractor	500	HSE Plan No of reported cases	Accident Report	Compliance with HSE Plan	School premises	Monthly	ESO, PIU SSO,PIU	200

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
B	CONSTRUCTION PHASE										
		Provide and enforce usage of appropriate PPE.									
Sub Total				11.400							6,700

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
Demobilization of equipment and construction materials from the school											
Environmental Impacts											
1	Soil and water contamination from oil/ lubricants	Cart away all spoils through the relevant authorities Clean out impact areas	Contractor	800	Oil Spillages, construction waste and spoilt equipment/parts	Site inspection	Good house keeping	School premises Workers Campsite	Quarterly	ESO, PIU	200
Operation and use of facilities											
2	Waste generation	Implement on-site waste management plan on a continuous basis	School Mgt	Part of yearly budget	Air, water and soil pollutants	In-situ air, water and soil sampling	Good waste management practice	School premises	As required	OGEPA	Part of annual budget
Demobilization of equipment and construction materials from the school											
Social Impacts											
3	Disruption in learning activities.	Limit demobilization activities to non-school periods	Contractor	-	No of complaints from school users	Interview	Satisfaction poll	School premises	As required during	School Mgt.	-

Activity	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost	Parameters to be measured	Method of measurement	Performance indicator	Sampling Location	Monitoring Frequency	Responsibility (Monitoring)	Costs (USD)
C	OPERATION PHASE										
Operation and use of rehabilitated facilities											
Social Impacts											
4	Operation Failures of renovated facilities may cause frustration	Routine checks and maintenance Timely reporting and fixing of faults	School Management	Part of yearly budget	No of complaints of Equipment failure report	Inspection/ Satisfaction Survey	Satisfaction level with new facilities	School premises	Quarterly	OGMOEST TVET Board	Part of yearly budget
5	Enhanced school infrastructure will increase enrolment demand beyond the capacity of the school	Proper documentation of minimum standards for enrolment including cut-off numbers	School Management PTA	Part of yearly budget	No of complaints received on subject matter	Stakeholder Perception survey	Stakeholders perception about the school	Project area of influence	Every two years	OGMOEST TVET Board	Part of yearly budget
6	Conversion of the technical college premises for the Training Institute	OGMOEST to review all developmental plans within TCs in order to maximise investments and ensure sustainability of projects	OGMOEST	-	Sustainability of the sub-project	--	-	-	-	TVET	-
Sub Total				800							200
TOTAL				14,050							7,800

CHAPTER EIGHT: INSTITUTIONAL ARRANGEMENT FOR ESMP AND MONITORING PLAN

This chapter outlines the ESMP institutional arrangements, capacity building plan, implementation schedule, contractual measures and ESMP disclosure procedures.

8.1 Institutional Arrangement for ESMP and Monitoring Plan

The roles and responsibilities for monitoring the environmental and social impacts, are defined in table 8 below:

Table 8: Institutional Arrangement for ESMP and Monitoring Plan

Institution	Responsibility
Safeguards Unit of the PIU	<p>Environmental Safeguards</p> <ul style="list-style-type: none"> Identify and liaise with all stakeholders involved in environment related issues in the project; and be responsible for the overall monitoring of mitigation measures and the impacts of the project during implementation. <p>Social Safeguards</p> <ul style="list-style-type: none"> Identify and liaise with all stakeholders involved in social related issues during the palliative rehabilitation <ul style="list-style-type: none"> Ensure that an effective Grievance Redress Mechanism is established
OGSTEP Project Implementation Unit (PIU)	<ul style="list-style-type: none"> Coordinate all stakeholders in preparing a coordinated response on the environmental and social aspects of the palliative works to be carried out; Safeguards due diligence
Ogun State Ministry of Environment (OGMOE)	<ul style="list-style-type: none"> Monitor, evaluate and audit the implementation of the ESMP to ensure that the rehabilitation works and project operations meet “best environmental practices”.
Ogun State Environmental Protection Agency (OGEPA)	<ul style="list-style-type: none"> Ensure that environmental protection regulations as defined in the ESMP are complied with including air quality, sanitation, solid waste, hazardous waste management plans
OGMOEST/ (TVET) Board	<ul style="list-style-type: none"> Ensure that project implementation of mitigation measures is carried out in line with specification, quality and timelines within the school premises
School Management	<ul style="list-style-type: none"> Monitor day to day compliance of contractors to mitigation measures on-site Escalate issues of non-compliance to the PIU
Primary Health Care Centre	<ul style="list-style-type: none"> Awareness creation exercises on Gender Based Violence (GBV), Sexual Exploitation Act (SEA), HIV/AIDS, Environmental Protection and Personal Hygiene and Sanitation
World Bank	<ul style="list-style-type: none"> Overall supervision and provision of technical support and guidance. Recommend additional guidance for strengthening the management framework and implementation performance
Contractors	<ul style="list-style-type: none"> Implement all mitigation measures in the ESMP Compliance to BOQ specification in procurement of material and construction
Supervising Consultants	<ul style="list-style-type: none"> Provide an independent oversight ensuring contractors adhere strictly to the engineering specifications and mitigation measures in the ESMP
Project Host Community	<ul style="list-style-type: none"> Support with provision of necessary infrastructures and engage/ encourage carrying out comprehensive and practical awareness campaign for the proposed palliative works, amongst the various relevant grass roots interest groups
NGOs/CBOs	<ul style="list-style-type: none"> Assisting in their respective ways to ensure effective response actions during the palliative works, Awareness campaigns and as 3rd party monitors

Record Keeping

The contractor should keep records providing evidence of ongoing mitigation activities. These documents should be made available upon request.

The Safeguard Unit should keep records to provide evidence of monitoring activities and effectiveness of the monitoring plan to include monitoring Plan, identified problems/corrective actions and monitoring Reports.

8.2 ESMP Capacity Building Plan

An outcome of the public consultations with the various stakeholders is the capacity needs assessment for implementation of safeguards procedures at the State Ministries, Departments and Agencies (MDAs) as well as the PIU. Effective implementation of the ESMP can be inhibited by limited technical skills and resource constraints. Limitations identified include,

- limited capacity of OGMOE and OGEPA with respect to logistics for waste/ hazardous waste management, monitoring equipment, ESHS and other World Bank safeguards requirement
- lack of enforcement of development control regulations;
- limited knowledge of the PIU on World Bank Safeguards requirements and monitoring of mitigation measures during the project phases

Effective implementation of the ESMP necessitates the need for technical capacity in the human resource base of implementing institutions as well as logistical facilitation.

Table 9 below outlines a capacity building plan for ESMP and is to be implemented by the PIU

Table 9: ESMP Training Table

	Training Content	Who to Train	Cost (USD)	Cost (N)
ESMP Implementation				
1.	Training on ESMP Implementation: mitigation, roles & responsibilities, monitoring and budget	OGSTEP PIU, Ogun State Ministry of Environment, OGEPA, Primary Health Care workers, Technical College Management, Ministry of Education Science & Technology, TVET Board	3,200	1,168,000 @50,000 for 23 participants
2.	Environmental and Social Safeguards Training for contractors Code of Conduct	Contractors management and workers	2,000	730,000 @10,000 for 70 participants
3.	Training on Environmental, Social Health and Safety (ESHS)	Contractors management and workers, Safeguard Officers PIU	4,500	1,642,500 @ 40,000 for 41 participants
Capacity Building for Monitoring				
4.	Measurement of parameters during monitoring activities Equipment for monitoring and evaluation Purchase in-situ test kits, PPEs, optimize laboratory	Ogun State Ministry of Environment OGEPA	4,100	1,496,500 @340,000 for in-situ test kits, 150,000 for PPEs, lab reagents and tests 1,000,000

5.	Capacity enhancement and support for effective construction/ asbestos waste management: preparation of sanitary landfill, MOU with specialized PSPs, training on handling hazardous waste	OGEPA	8,200	2,993,000
TOTAL			22,000	8,030,000

8.3 Implementation Schedule

The project implementation phase is estimated to be completed in eight (8) months. The implementation schedule is presented in Table 10 below.

Table 10: ESMP Implementation Schedule

S/N	Activity Description	Responsibility	Preconstruction Month)				Construction (Month)								Operation
			1	2	3	4	5	6	7	8	9	10	11	12	
1	End of ESMP disclosure period	PIU													
2	Inclusion of Environmental & Social Requirements in Bid Documents	PIU													
3	Allocating Budget for ESMP	PIU													
4	Review and Approval of Contractor's ESMP, Asbestos waste, Solid Waste & OHS Plan	PIU													
5	Finalization of Engineering Designs	PIU/Engineering Design Consultant													
6	Mobilization to site	Contractor													
7	Construction Phase	Contractor													
8	Implementation of Mitigation Measures	Contractor													
9	Supervising ESMP Implementation	PIU													
10	Monitoring & Reporting on ESMP Implementation	PIU/Relevant MDAs													
11	Environmental and Social Risk Management Training	PIU/ Consultant													
12	Environmental and Social Audit	PIU/ Consultant													

8.4 Contractual measures

The potential contractor will prepare their proposals considering the mitigation measures in Table 11 as well as the detailed general environmental management conditions during civil works. This section outlines some guidelines to be embedded in the contractors' contract to provide for ESMP implementation.

Table 11: Contractual Measures

Action	Remarks
The measures as described in this ESMP must be included in the tender documents with appropriate flexibility to adjust these measures to site circumstances, and that the potential contractor will have to prepare their proposals considering these measures.	The non-inclusion of these measures in the proposal will lead to a disqualification of the proponent; The contract with the successful bidder should contain these environmental and social management measures as firm conditions to be complied with.
Specifically, the measures should be translated into a suite of environmental specification that are written in the same language style and format as the rest of the contract document	This approach will ensure that the environmental and social controls integrate seamlessly into the tender document and are presented in a familiar form to the Contractor
Cost of mitigation measures only, will be added to the cost of the contractual document	The contractor must consider and put the cost for the environmental and social requirements specified in the ESMP.

Relevant frameworks to guide the PIU and the contractors are provided in the annex of this ESMP:

- Asbestos management plan (annex 6)
- Waste management plan (annex 7)
- Sample Code of Conduct (annex 8)

While other frameworks are provided in the project Environmental and Social Management Framework (ESMF) including:

- General Environmental and Social Management Conditions for Construction Contracts
- Procedures for Gender Based Violence Management
- Grievance Redress Mechanism
- Health and Safety Plan (HSE)/Occupational Health and Safety

8.5 ESMP Disclosure

Following the review and clearance of this ESMP by the World Bank, it will be disclosed at the National and local levels by the OGSTEP PIU. Disclosure will be in line with the Nigerian EIA Law and the World Bank Safeguards Policies. The PIU shall liaise with the Federal Ministry of Environment (FMEnv) to register and obtain the minimum requirements for disclosure. Budget for disclosure is estimated at N870,000 (\$2,383.5.00) as shown in table 12 below.

Table 12: Budget for ESMP Disclosure

Item	Cost Estimate in Nigerian Naira (₦)	Cost Estimate in US Dollars (USD)
Registration at FMEnv	50,000	136.9
Newspaper advert (at least 2 dailies)	600,000	1643.8
Printing Costs	100,000	274
Circulation of report copies	20,000	54.8
Consultation on disclosure	100,000	274
Total	870,000	2,383.5

8.6 Grievance Redress Mechanism

An elaborate Grievance Redress Mechanism (GRM) Framework is contained in the ESMF to address how grievances, complaints, and concerns will be received, assessed, sorted, resolved, and monitored in line with the OGSTEP.

Under the rehabilitation of technical colleges, the potential areas that grievances may arise from project implementation include:

1. Dispute between contractors and the stakeholders within the school (students, teachers, workers, traders etc.)
2. Dispute between technical colleges and their host communities
3. Dispute between contractors and the host community
4. Dissatisfaction of the project direct beneficiaries (students, teachers, management) with project implementation

8.6.1 Levels of Grievance Redress for the Rehabilitation of the Technical Colleges

Four levels of grievance redress channels have been identified:

Level of GRM	Source of Complaint	Whom to Report to	Action to be taken	Permanent Members of the Grievance Redress Committee (GRC)
First Level GRM: GRC at the Site/community Level:	Complaints arising from the project area regarding project implementation and activities	School principal	Convene the GRC committee to review and address the complaint	<ul style="list-style-type: none"> • Two top management officers of the school including the principal • One representatives of elderly group within the school • One representative of old students association • The chairman of the PTA
Second Level of GRM: GRC at the SPIU Level	Unresolved complaints from first level	Social Safeguard Officer, PIU	Convene the GRC committee to review and address the complaint	<ul style="list-style-type: none"> • Social Safeguard Officer • Communication officer/ Public relations officer • Environmental officer • Monitoring and Evaluation officer

	New Complaints regarding project activities			<ul style="list-style-type: none"> • The project Engineer
Third Level of GRM: GRC at the State Technical Committee Level	Unresolved complaints from second level	Project Coordinator (PC)	Convene the GRC committee to review and address the complaint	<ul style="list-style-type: none"> • The Permanent Secretary Ministry of Budget and Planning • Director Ministry of Education, Science & Technology • Director Ministry of Environment • The Project Coordinator of OGSTEP • A witnessing NGO
Fourth Level of GRM	Unresolved matters from third level	Local court	Settle the matter	Refer to court system

Complaints can be written, by phone, or in person. Budget for grievance redress shall be 5% of mitigation cost. **\$3650 (N1,332,250)**

8.6.2 Grievance Management Process

There is no ideal model or one-size-fits-all approach to grievance resolution. Workable GRM are however one that is designed based on consultation and stakeholder inclusion. *It must take into account the specific issues, cultural context, local customs, industry standards and project conditions. Nevertheless, an outline of the Grievance Redress Flow Path/process that could be followed is given below:*

- receive, register and acknowledge complaint;
- screen and establish the foundation of the grievance;
- implement and Monitor a redress action;
- advise for a judicial proceedings as last resort if necessary;
- document the experience for future reference essentially; registration of complaints, acknowledgement, follow-ups, mediation and corrective actions is presented.

Table 13: Principal Steps in Grievance Redress Management Process

1	Receipt of the grievance	1/2 day
2	Completion of the grievance form	1/2 day
3	Entry of the complaint into the grievance database/ registration	1/2 day
4	Preliminary assessment of grievance: internal evaluation of the severity of the complaint	2 days
5	Written acknowledgement of the receipt of the grievance. If key information is missing from the grievance, request for further information	7 days
6	Investigation and resolution of grievance	2-4 weeks

7	Response letter and registration in database. If the solution is accepted, resolution (including any payments) and closure of the case	Within 5 weeks
8	If the proposal is not accepted by the complainant, referral to the Higher Level Committee	5-6 weeks after registration of grievance
9	Resort to judicial measures	At any stage in the process though complainant would be persuaded to exercised patience until thorough utilization of this mediation path

8.7 ESMP Implementation Budget

The total cost for Implementing the ESMP and Monitoring Plan for the rehabilitation works is estimated at **\$143,570 (₦53,169,638)**

Table 14: Summary of ESMP and Monitoring Budget

Item	GSTC Ijebu Ode	GSTC Ayetoro	GSTC Igbesa	GSTC Ajegunle	GSTC Idi-Aba	GSTC Ilara Remo	Cost (\$)	Cost (₦)
Mitigation	12,250	13,850	10,150	14,200	14,050	8,500	73,000	26,645,000
Monitoring	7,400	7,400	6,800	7,400	7,800	5,400	42,200	15,403,000
Capacity Building	-	-	-	-	-	-	22,000	8,030,000
Budget for Grievance Redress	--	-	-	-	-	-	3,650	1,332,250
Budget for Disclosure	-	-	-	-	-	-	2,383.5	870,000
SUB- TOTAL							141,234	52,280,250
Contingency 5%							7,061.7	2,614,012.5
Grand Total							148,296	54,894,262.5

Total Budget: One Hundred and Forty-Eight Thousand, Two Hundred and Ninety-Six dollars (Fifty-Four Million Eight Hundred and Ninety-Four Thousand, Two Hundred and Sixty Two Naira)

CHAPTER NINE: STAKEHOLDERS CONSULTATION

The details of stakeholder consultations for the preparation of the ESMP is presented in this chapter including concerns raised by stakeholders and how they were addressed.

9.1 Introduction

The ESMP consultation process took place between 18th – 21st February in line with the Bank's best practice Policy on disclosure and consultation. Stakeholders consulted include:

- representatives and leadership of the host community – leaders, women group, youth group, market women, elderly group;
- college administration;
- Parents Teachers Association of the colleges;
- students of the GTSCs;
- Primary Health Workers, Other critical stakeholders consulted include;
- TVET Board Representatives; and
- representatives of Ministry of Education, Science & Technology

Stakeholder consultations by the PIU, contractors, consultant will remain an on-going exercise throughout the duration of the entire project.

9.2 Summary of Stakeholders Consultation

Meeting Title	Participants	Concerns/Complaints	Remarks/Recommendations
General Consultations at the Technical colleges	School management, community representatives, PTA, Primary health workers, youth, women, elderly,	Movement of heavy duty vehicles on market days may cause traffic and disturbance to the community from movement of heavy duty/machinery	Contractors will limit movement of vehicles and machinery on market days
		Disturbance of academic activities	The community will be consulted prior to each phase of the project
		They request that the local workforce is used by contractors	Project activities will be maximum during holidays, weekends, after school hours
		Stakeholder apprehension from delayed project implementation	Contractors will be encouraged to use local labour if they are qualified but project quality must not be compromised
Consultation with women group	Women leaders, Market women, female teachers, community women	The issue of sexual exploitation by these contractor workers especially in schools like Ijebu-Ode, Idi-Aba and Ajegunle that have female hostels on-site.	The PIU will ensure project preparatory activities are completed timely in line with the EIA laws and World Bank guidelines
		Campsites for construction workers need to be separately located to avoid issues	<ul style="list-style-type: none"> • Contractor workers will be trained and educated on code of conduct which they will all sign. • The school management/ community to create similar awareness for their children.
Meeting with Students at the Technical colleges	Students	They requested that modern equipment for workshops, labs and ICT department	<ul style="list-style-type: none"> • The school management should work with the community leaders on a suitable site for the workers campsite. • However, it is not advised that contractors are camped within the school premises
			The PIU explained that this is part of the overall project activities. The school management should collate and forward a list of all equipment requirements which will be reviewed during the feasibility studies

		Inquired if instructors with the appropriate skills required to handle these modern tools will be provided by the government to their college	Teachers training is also part of the project
		Project activities to start on time	There is a process required for World Bank interventions for safeguards and procurement which has to be strictly followed. The PIU committed to ensure project activities are not delayed
		Equipment provided may be stored and not utilised by students	The OGMOEST/TVET will monitor the impacts of the project on a regular basis and such issues of unutilised equipment will be corrected
Consultation at the State level	PIU, Ogun state Ministries of Education, Science and Technology, Environment, Environmental Protection Agency, Technical and Vocational Education Board, Technical College principals	<p>Stakeholders wanted an overview of their expected roles in the ESMP implementation.</p> <p>Critical issues discussed include:</p> <ul style="list-style-type: none"> • The role of OGEPA in handling the construction wastes and asbestos waste which is toxic • The role of all stakeholders in ensuring social protection of the students and project host community. 	<p>The consultant provided a summary of each stakeholders role in the ESMP, the cleared ESMP will be disclosed and they should endeavour to review it and understand their various roles</p> <p>The current waste management practice for collection and disposal of waste from the TCs is very weak, hence the capacity of OGEPA will need to be supported to fulfil their roles in the OGSTEP. The PIU will engage in further discussions with OGMOE/OGEPA to discuss areas of needed support.</p>

Attendance sheets and pictures of consultations are provided in annex 3

CHAPTER TEN: RECOMMENDATIONS AND CONCLUSION

This chapter presents recommendations to be undertaken by the SPIU to enhance the achievement of environmental and social safeguards, and a conclusion to the ESMP report.

10.1 Recommendations

The rehabilitation of the TCs will have highly beneficial impact on the immediate communities as it will contribute to the improvement of learning.

Although, the civil works especially during construction phase of the project will lead to some limited environmental and social impacts, these adverse impacts will largely be localized in spatial extent, short term and occurring within less sensitive environmental areas. These will be managed through the application of the appropriate mitigation measures stated in the ESMP matrix tables for each technical college, inclusion in contractors agreement, good construction practices, effective maintenance and adequate supervision and enforcement during project implementation.

In consideration of the above therefore, there is no major environmental or social issue to impede the implementation of the proposed project. Below are some of the recommendations to be undertaken by the SPIU that will enhance the overall sustainability of the proposed project especially during the implementation phase of the project:

- water should be used for dust suppression during civil works especially those involving excavations and other dust generating activities in order to protect nearby communities from respiratory and eyes problems and other health related challenges of dust.
- construction safety signs boards and work area lightening should be installed to protect workers and members of the public around the construction sites
- priority should be given to local workers during project implementation to stimulate local socioeconomic activities, improve livelihood and poverty reduction in the affected communities. Ensure affected communities are assisted and have a voice in appropriation of mitigation measures.
- the contractor and PIU should coordinate with the Ogun State Traffic Management Agency all through rehabilitation works on site to ensure that safety is maintained and potential traffic impact managed;
- all bare and exposed soils should be re-vegetated with native vegetation immediately after construction to prevent erosion,
- construction works should be carried out in an environmentally sustainable and socially responsible and inclusive manner;
- the Safeguard Unit of PIU should ensure active monitoring to ensure the contractor adhere strictly to the requirements of this ESMP especially in the application of mitigation measures during project implementation.

- the SPIU should ensure that the relevant sections of the ESMF as indicated in the chapter 8.4 of this ESMP should be made available to contractors

10.2 Conclusion

The ESMP has provided in detail the mitigation measures for identified potential adverse impact for the various phases of the project, and a monitoring program to ensure compliance. With adequate application of mitigation measures the impacts will be avoided, reduced or mitigated, and in very few cases they may be offset.

The SPIU should also ensure that the capacity building program is adhered to in a timely manner to ensure that all identified stakeholders effectively carry out their responsibilities in the implementation of the ESMP.

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ANNEX ONE: TERMS OF REFERENCE

BACKGROUND

The Ogun State Government is requesting assistance from the World Bank to fund the Ogun State Economic Transformation Project (OGSTEP) through an Investment Project Financing instrument. The amount of the proposed program is USD 350 million, and it will support the Ogun State Development Plan (SDP) (2018-2030) with a focus on business environment, skills development and public sector governance. An excerpt of the description of the skills development aspects is presented.

Skills Development: The Ogun State government recognizes that accelerated agricultural production and industrialization induces an increased demand for skills and competent workers and service providers across sectors. The State therefore needs to develop its skills sector in a way that responds to demand within the broader vision of accelerated agricultural production and industrialization in the state. The State has developed a long-term strategy up to 2030, the State Education Sector Plan (SESP), which identifies skills development, improving the quality of education, STEM, and the reform of non-formal education as major strategic objectives in the education sector and a means to better align skills supply with demand. The non-formal sector includes literacy programs as well as Technical and Vocational Education and Training (TVET). The SESP is implemented in the medium run through the 2018-2020 State Education Operational Plan (SEOP).

1. PROJECT DEVELOPMENT OBJECTIVES

The Project Development Objective (PDO) is to increase agricultural production and stimulate private sector participation in the agricultural, industrial and skills sectors of the Ogun State economy.

DESCRIPTION OF THE PROPOSED INTERVENTION

The proposed scope of civil works to be carried out includes the rehabilitation of existing technical colleges across Ogun State. Activities include:

- site clearance;
- removal of asbestos ceilings/roofs and reroofing;
- painting of walls, Rehabilitation of windows and doors; Rehabilitation of toilet facilities;
- reconstruction perimeter fencing;
- expansion of classrooms and workshops; and
- provision workshop equipment

The proposed activities have the potential to generate environmental and social safeguards impacts including noise and dust generation; loss of vegetation; solid waste generation; obstruction of mobility of people living in the project area; occupational health and safety; public safety and traffic issues etc;

In line with the above, OGSTEP wishes to engage the services of eligible consultants to prepare an Environmental and Social Management Plan (ESMP) prior to commencement of the civil works in the technical colleges. Installation of the civil works will be governed by a construction contract containing comprehensive specifications for ensuring public safety and routine environmental protection.

2. OBJECTIVE OF THE ASSIGNMENT

The specific objective of the study will be to assess the potential environmental and social impacts of the proposed works as described above in the scope of work and prepare an Environmental and Social Management Plan (ESMP) The study will be carried out to establish modalities of implementing the projects in line with Nigeria environmental policies and laws, Ogun State Ministry of Environment and the World Bank environmental and social Safeguard policies.

3. SCOPE OF WORK

The objective of the consulting services is to prepare an environmental and social management plan (ESMPs) for the proposed rehabilitation of technical colleges.

The ESMP should consist of a well-documented set of mitigation measures, monitoring, and institutional actions to be taken before and during implementation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. It should also include the measures required to implement these actions, addressing the adequacy of the monitoring and institutional arrangements in the intervention site.

ANNEX TWO: SUMMARY OF THE WORLD BANK OPERATIONAL POLICIES TRIGGERED FOR THE SUB-PROJECT

N	Triggered Policy	Description	Reason for Trigger
i.	Environmental Assessment (OP 4.01)	<p>This policy requires environmental assessment (EA) of projects/investments proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus improve decision making.</p> <p>Given that the exact locations of the Technical Colleges are fully known at this stage, the ESMP is the appropriate safeguards to address this policy.</p>	The proposed project will finance the rehabilitation of the technical colleges which includes various forms of building renovations and expansion of technical workshops and laboratories, will have potential negative environmental and social impacts. This has been outlined in the various chapters for each technical college. However, these impacts are limited, site specific and can be mitigated.
ii	Natural Habitats (OP 4.04)	<p>This policy promotes the protection and conservation of the natural home or environment of an animal, plant, or other organism, as a means to enhance long-term sustainable development.</p> <p>Site specific mitigation measures in the ESMP will address this policy.</p>	Activities with the potential to cause significant conversion (loss) or degradation of natural habitats, whether directly (through construction) or indirectly (through human activities induced by the project).

ANNEX 3: SUMMARY OF PICTURES FROM CONSULTATION



Plate 21: Consultation with Women Group GSTC Idi-Aba



Plate 22: Consultations with Students at GSTC Ijebu-Ode



Plate 23: Consultation with Community Leaders at GSTC Igbesa





Plate 24: Stakeholders at GSTC Ayetoro



Plate 25: Commissioner for Budget & Planning
addressing stakeholders at GSTC Ilara Remo

ANNEX FOUR: LIST OF PERSONS MET

Table 15: State Level Consultation Attendance Sheets

  Ogun State Agricultural Production and Industrialisation Project Preparation of Environmental and Social Management Plan (ESMP)					
Attendance Sheet					
S/NO	Name	Organisation/ Designation	Phone Number	Email	Signature
1	Chuks Oyeleye	Ministry of Edu. Sci. Tech	08052604391	roneloye8@gmail.com	
2	S.A. Raheem	Min. of Edu. Sci. Tech	08035820205	raheem825@yahoo.com	
3	Laiten Oluwole	OGAPI PM MoEST	07034881282	oguneducation@gmail.com	
4	O.M. OLOKO (MRS)	MIN. OF EDUC. SC. TECH	08033901982	oluwatinsunioriano@gmail.com	
5	J.S. OYEPO	OGSTVER	08034284819	josephmaich3@yahoo.com	
6	Obe Abolaji. O.	Ministry of Edu. Sci. Tech	08165641723	abojide100@gmail.com	
7	Sodunke Nurudeen B.	OGSTVER	08034439270	oluwatinsunioriano@gmail.com	
8	Donald Olanrewaju	Environmental Consultant	08039127013	donaldolanrewaju@gmail.com	
9	Dr Isaac. A. Lekan	Consultant	08064648260	isac.agbalekanrewaju@gmail.com	
10	AKINJUNIRE ADEWOLE	Consultant	08099909404	adejokeakin@ yahoo.com	



  Ogun State Agricultural Production and Industrialisation Project Preparation of Environmental and Social Management Plan (ESMP)					
Attendance Sheet					
S/NO	Name	Organisation/ Designation	Phone Number	Email	Signature
1	OREKOYA B. A	MOEnv - DSD	08033378290	bolankey8@gmail.com	
1	Salu K. ADEOTAN. O. A	EDGMBW - DPRS	08035753685	saluadeotan@gmail.com	
3	SHOPELA Akinwale. O	DGEPA - Dnm	08060279757	shopeleakinwale@gmail.com	
4	Chuks Oyeleye	Ministry of Edu. Sci. Tech	08052604391	roneloye8@gmail.com	
5	O.M. OLOKO (MRS)	EDUC. SC. TECH	08033901982	oluwatinsunioriano@gmail.com	
6	ADEGBOLA Kamilu	PRINCIPAL GSC - I - Oke	0803858822	adejokeakinwale@gmail.com	
7	SALU SAMUEL A.	PRINCIPAL GSC - I - Oke	08063877097	saluamueladejoke@gmail.com	

Table 16: Consultations at the Technical College

Preparation of Environmental and Social Management Plan (ESMP)					
Attendance Sheet					
S/NO	Name	Organisation/ Designation	Phone Number	Email	Signature
1	OMOTOKA, S.O	PRINCIPAL	07032031220	omotokaentengbo4@gmail.com	
2	AKINLOTAN A. B	VICE PRINCIPAL	07037378884	Akinlotanidey@gmail.com	
3	SADIQ O.P	VICE PRINCIPAL (ACAD)	07020696341	saifemipk@yahoo.com	
4	Jeremiah Emmanuel I	EX STUDENT PRESIDENT	08033766299	alopbamuyon@yahoo.com	
5	Idowu Adakunle. I	EX STUDENT V.P	07018039030		
6	Akinfadoy Wale O.	Community Representative	08029004220	akinfadoywalu@gmail.com	
7	Akinfadoy Wale O.	Youth Rep.	08028512915		
8	TUSUF MUTIEN	Youth Rep.	08034301791	jusufmutien2012@gmail.com	
9	Ajose Akem. O.	Youth/ CDA Representative			
10	Aka Olusola	Youth Rep	08038550607	olusolaaka@gmail.com	
11	Adelere Folake	Education Comm.	08056352946	adelerefolake@gmail.com	
12	BUSARI Lukman. O.	Youth Rep	07064387791	clavialabusari@gmail.com	
13	Tusuf Malig. O.	Youth Representative	08022561372	maligoye19@gmail.com	
14	Ajo Ajibade Fatmi	Youth Representative	08058312453	ajofatmi@gmail.com	

ANNEX FIVE: QUESTIONNAIRE FOR SOCIO-ECONOMIC SURVEY AND INFORMATION GATHERING

SOCIO-ECONOMIC AND HEALTH INFORMATION FOR ENVIRONMENTAL IMPACT ASSESSMENT

GENERAL INFORMATION

1. What is your name/ phone number?
2. What post do you hold in the community?
3. What is the name of the leader in this community?
4. What is the predominant tribe and languages spoken?
5. What is the average number of household size?

ECONOMIC INFORMATION

6. What are the means of livelihood here?

	MEN	WOMEN	YOUTHS
1			

7. What are the common crops farmed here?
8. What livestock do you keep around here?
9. What wildlife do you have here?

CULTURE AND RELIGION

10. Are there any sacred plants, water, animal, artefact or forest? (name)
11. What are the festivals celebrated and months of celebration?
12. Are there major taboos in this community?

COMMUNITY POLITICS

13. What is the method of selecting the Traditional Ruler?
14. What is the hierarchy of rulership like here?
15. Do women participate in decision making here?
16. Are women free to engage in politics outside the community?

EDUCATION

17. Do you have schools here?

SCHOOL	NAME
PRIMARY	
SECNDARY	
TERTIARY	

18. Are there community children that do not attend these schools? (Why?)
19. Do people from other communities attend these schools?
20. Do the teachers for these schools stay within the community?

ANNEX SIX: ASBESTOS MANAGEMENT PLAN

Introduction

- Currently the ceilings in the technical colleges are asbestos ceiling which will be removed and replaced. This process has to be properly managed because asbestos is toxic and a known carcinogen.
- This Asbestos Management Plan (AMP) has been prepared to outline the requirements and procedures for asbestos management for the project in line with national and state environmental regulations, and environmental best practices.
- The plan outlines procedures for removal, handling, transportation and disposal

OGEPA has 9 dumpsites in the State. It is important that the agency identifies at least 2 of the dumpsites and upgrade them to engineered landfills licenced to dispose hazardous waste, through the help of the State Government, prior to commencement of project activities. The PIU can follow closely on this activity and make recommendations as required.

Table 17 below presents the asbestos waste management plan

Table 17: Asbestos Management Plan

Activity Description	Action to be taken	Timing (When it should be done)	Responsibility (Who to do it)	Budget	Monitoring Indicator
Removal of asbestos ceiling from the technical college buildings	Sensitise workers on asbestos hazard	Pre-construction phase during mobilization to site	Contractor	Captured in mitigation table as part of contractors training program	<ul style="list-style-type: none"> Evidence/ Meeting report Interview with workers
	Sensitise workers on asbestos hazard and acceptable environmental and health practices	Prior to construction	Safeguard Officers, PIU	Captured under safeguards training for contractors (ESMP Training Plan)	Training report
	Give prior notice of 7 days to OGEPA through the PIU before removal of asbestos	During construction phase	Contractor PIU	-	Evidence of documented notice
	<ul style="list-style-type: none"> Workers should use adequate PPES (disposable nose mask, gloves, overall, boot, eye goggles) to avoid exposure to asbestos dust Coveralls should be type 5, category 3 (prEN ISO 13982–1 Protective clothing for use against solid particulates) or equivalent 	Throughout period of removal of asbestos ceiling	Contractor	Captured in the mitigation tables for each technical college	Compliance by workers, observed during site inspection
Handling of removed asbestos ceiling	<ul style="list-style-type: none"> Removed asbestos ceiling should be properly stacked at a designated, demarcated (red tape) and restricted area on-site Site should have an impermeable platform Not more than 4 working days 	During construction phase	Contractor	Between \$68.5 - \$136.9 (N10,000 – N50,000) per college depending on quantities of asbestos on-site	Compliance by workers, observed during site inspection
	Used disposable PPE is to be placed in a sealed heavy-duty 200µm (micrometres) (minimum thickness) polythene bag no more than 1,200mm long and 900mm wide. The outside of the bag should be wiped down using a damp cloth. The bag should then be sealed with duct tape and labelled as “Asbestos Waste”.	Contractor workers		Between \$136.9 - \$273.9 (N50,000 - N100,000) per college depending on quantities of asbestos on-site	Inclusion in contractor budget
	Following removal of PPE, personnel are to thoroughly clean their face, hands and fingernails with soapy water	Daily	Contractor	\$30 (N10,950) per college	Contractor Compliance
Evacuation of asbestos waste from site and transportation	<ul style="list-style-type: none"> Prior notice of delivery of asbestos loads, 48 hours must be given to the OGEPA Dumpsite 	48hours before evacuation	OGEPA	-	Evidence of notice
	<ul style="list-style-type: none"> Transport vehicles must meet regulatory specifications Loads must be handled, unloaded and placed in the cell carefully to avoid damaging packaging and generation of dust in accordance to hazardous waste regulations Use of appropriate PPEs (disposable nose mask, gloves, overall, boot, eye goggles) Driver/Personnel must be trained personnel on hazardous waste management 	During construction phase	OGEPA	Captured under capacity building costs in ESMP implementation budget OGEPA operational budget as an agency	Visual observation and inspection

Activity Description	Action to be taken	Timing (When it should be done)	Responsibility (Who to do it)	Budget	Monitoring Indicator
	<ul style="list-style-type: none"> A weighbridge attendant must be present at evacuation of waste from site: all asbestos loads will be inspected by the weighbridge attendant and documented 				
Acceptance of asbestos waste at landfill	<ul style="list-style-type: none"> The landfill must be licensed to accept asbestos material for disposal All asbestos load reaching the landfill must be duly registered (date, quantity, source) 	After evacuation of waste from site	OGEPA	Captured under capacity building costs in ESMP implementation budget OGEPA operational budget as an agency	Evidence of license Duly filed Register
Management and Disposal of Asbestos waste	<ul style="list-style-type: none"> Relocate waste to disposal site Immobilize the waste by encapsulation with cement or other acceptable material Subsequently, it can be used as interlocking blocks or incinerated at an appropriate incinerating facility Minimum requirements for management include: <ul style="list-style-type: none"> ✓ an exclusion zone must be established during the unloading of asbestos; ✓ all untrained personnel must remain outside the exclusion zone; ✓ all asbestos loads should be wet down (with a fine mist) prior to unloading; ✓ asbestos must be unloaded using either front end loader or excavator; ✓ loads should be dropped off as close to the active monocell as possible to minimise handling of the material and potential for damage to packaging to occur 	During disposal	OGEPA	Captured under capacity building costs in ESMP implementation budget OGEPA operational budget as an agency	Site inspection and observation
Incidents and Accidents Management	<ul style="list-style-type: none"> All incidents, asbestos spills etc. must be reported to the site manager immediately Spill area to be zoned off and restricted immediately If a person is exposed to asbestos without the use of appropriate PPE the following decontamination procedure must be undertaken: <ul style="list-style-type: none"> ✓ immediately wet down the person with fine spray/mist of water; ✓ the person must then walk to the nearest shower facility (if not, vehicles or machinery may be contaminated); ✓ gently remove all contaminated clothing and place in a sealed bag; 	During removal of asbestos During evacuation and transportation of waste During acceptance at the Landfill	Contractor Driver	Captured in previous processes	Incident Report

Activity Description	Action to be taken	Timing (When it should be done)	Responsibility (Who to do it)	Budget	Monitoring Indicator
	<ul style="list-style-type: none"> ✓ shower to remove all dust and asbestos fibres with particular focus on the hair, face, hands and fingernails; Change into clean clothing; and ✓ the bag must be labelled with "Asbestos Waste" and disposed of appropriately. • All personnel assisting with the decontamination procedure must wear, as a minimum, a P2 dust mask • Incidents must be duly documented 	During management and disposal procedures	<div>Landfill Site Manager</div> <div>Landfill Site Manager</div>		
Record keeping	Records to track the lifecycle of the asbestos waste must be kept by every institution involved	As required		Part of operational costs	Evidence of records
	Issue certificate of disposal to the contractor/OGÉPA	As required	Landfill Site Manager	Part of operational costs	Evidence of certificate
	Store all records for a minimum of 40 years	As required	OGÉPA	Part of operational costs	Evidence of records

ANNEX SEVEN: WASTE MANAGEMENT PLAN

Introduction

This plan has been developed to guide the management of waste that will result from project activities during all phases of the project.

The major waste streams identified are:

- construction and demolition waste – ceiling, roof, windows, doors, cement, block, metals etc;
- e-waste from evacuation of damaged electronics and from workshops during operation phase;
- effluent from oil & chemical spills from machines and laboratories during operation phase;
- solid and sanitation waste from contractors campsite;
- organic waste from food.

Table 18 below presents site specific waste management plan

Table 18: Waste Management Plan

Activity Description	Action to be taken	Timing (When it should be done)	Responsibility (Who to do it)	Budget	Monitoring Indicator
On-site waste management during construction	<ul style="list-style-type: none"> • Liaise with OGEPA to discuss on evacuation and disposal of waste to be generated by project activity: ✓ Hold prior consultations with OGEPA through the PIU 	During mobilization phase	Contractor	Part of contractors operational costs	Meeting Report
	<ul style="list-style-type: none"> • Identify, demarcate, restrict area where waste will be collected on-site • All waste categories should be separated • All categories of waste should not be dumped together • Dispose all wastes in authorized areas, metals, used oils, etc. • Erect erosion control barriers around perimeter of cuts, disposal pits, and roadways • Establish and enforce daily site clean-up procedures, including maintenance of adequate disposal facilities for construction debris. 	During construction	Contractor	a) \$548 - \$822 (N20,000 – N300,000) per site depending on quantum of envisaged waste	Site inspection
	Spoil, topsoil and mulch are to be stockpiled onsite and mitigation measures for dust control and soil pollution in the ESMP table to be implemented	During construction	Contractor	Captured in a) above Also part of mitigation costs	Site inspection
	Sludge and lliquid wastes are to be stored in appropriate containers in bunded areas until transported offsite. Bunded areas will have the capacity to hold 110% of the liquid waste volume for bulk storage or 120% of the volume of the largest container for smaller packaged storage	During construction	Contractor	Captured in a) above	Site inspection
	Ensure that all equipment maintenance activities, including oil changes, are conducted within demarcated maintenance areas designated for such. Ensure that oil or other lubricants are never dumped on the ground, but only in designated areas.	During construction	Contractor	-	Site inspection
	Hazardous wastes should be handled in line with the asbestos management plan in annex 6	During construction	Contractor	-	Site inspection
	<ul style="list-style-type: none"> • Construction material accumulation shall be reduced by any possibility. • All wastes must be cleared from site before final demobilization from site • Good housekeeping procedures to be followed • No waste must be burnt on-site 	During construction/ Demobilization from site	Contractor	-	Site inspection
Waste evacuation	Prior 7 days notification to OGEPA of waste to be generated through the PIU	During construction	Contractor	Part of operational costs	Notice

Activity Description	Action to be taken	Timing (When it should be done)	Responsibility (Who to do it)	Budget	Monitoring Indicator
and transportation	<ul style="list-style-type: none"> • Transport vehicles must meet regulatory specifications • Loads must be handled, unloaded and placed in the cell carefully • Use of appropriate PPEs (disposable nose mask, gloves, overall, boot, eye goggles) • Driver/Personnel must be trained personnel on waste management • A weighbridge attendant must be present at evacuation of waste from site • Wastes should be transported to a licensed waste management facility 	During construction phase	OGEPA	Captured under capacity building costs in ESMP implementation budget	Visual observation and inspection
Waste Disposal	<ul style="list-style-type: none"> • Relocate waste to disposal site • Dispose of waste in an environmentally acceptable manner in line with national waste management regulations 	During construction phase	OGEPA	OGEPA operational budget as an agency	Disposal records
Manage waste in project operation phase	Laboratory effluent to be adequately channeled to a sewage system	During construction phase	Contractor	Part of design and construction costs	Observation
	<ul style="list-style-type: none"> • Provide waste bins in the school for each category of waste • Liaise with OGEPA on periodic waste evacuation from the school • Ensure good house keeping practices 	Operation phase	School Management	Part of yearly school operational cost	Visual inspection

ANNEX EIGHT: SAMPLE CODE OF CONDUCT

1. Code of Conduct for Contractors (Company Version)

CODE OF CONDUCT GENDER BASED VIOLENCE (GBV), SEXUAL EXPLOITATION & ABUSE (SEA), CHILD ABUSE & PROTECTION

FOR COMPANY TOP MANAGEMENT

The company is obliged to create and maintain an environment which prevents Gender Based Violence (GBV), Sexual Exploitation & Abuse (SEA) and Child Abuse & Exploitation (CAE) issues. The company is also required to maintain an environment where the unacceptability of GBV and actions against children are clearly communicated to all those involved in the project. In order to prevent GBV and CAE, the following core principles and minimum standards of behaviour will apply to all employees without exception:

1. GBV/SEA or CAE constitutes acts of gross misconduct and are therefore grounds for sanctions, penalties and/or termination of employment. All forms of GBV/SEA and CAE including grooming are unacceptable be it on the work site, the work site surroundings, project neighbourhoods or at worker's camps. Prosecution of those who commit GBV or CAE will be pursued.
2. Treat women, children (persons under the age of 18), and men with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
3. Do not use inappropriate language or behaviour towards women, children and men. This includes harassing, abusive, sexually provocative, demeaning or culturally inappropriate words, gestures or actions.
4. Sexual activity with children under 18—including through digital media—is prohibited. Mistaken belief regarding the age of a child and consent from the child is not a defence.
5. Sexual favours or other forms of humiliating, degrading or exploitative behavior are prohibited.
6. Sexual interactions between contractor's and consultant's employees at any level and member of the communities surrounding the work place that are not agreed to with full **consent** by all parties involved in the sexual act are prohibited. This includes relationships involving the withholding/promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex – such sexual activity is considered “non-consensual” within the scope of this Code.
7. All staff, volunteers, consultants and sub-contractors are highly encouraged to report suspected or actual GBV and/or CAE by a fellow worker, whether in the same contracting firm or not. Reports must be made in accordance with Standard Reporting Procedures.
8. All employees are required to attend an induction training course prior to commencing work on site to ensure they are familiar with the GBV/SEA and CAE Code of Conduct.
9. All employees must attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the institutional GBV and CAE Code of Conduct.
10. All employees will be required to sign an individual Code of Conduct confirming their agreement to support GBV and CAE activities.

I do hereby acknowledge that I have read the foregoing Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to GBV and CAE. I understand that any action inconsistent with this Code of Conduct or failure to take action mandated by this Code of Conduct may result in disciplinary action.

FOR THE COMPANY

Signed by _____

Title: _____

Date: _____

2. Code of Conduct for Contractors (Manager's Version)

CODE OF CONDUCT
GENDER BASED VIOLENCE (GBV), SEXUAL EXPLOITATION & ABUSE (SEA), CHILD ABUSE & PROTECTION
FOR MANAGERS

Managers at all levels have particular responsibilities to create and maintain an environment that prevents GBV and CAE. They need to support and promote the implementation of the Company Codes of Conduct. To that end, Project Managers are required to sign up to Codes of Conduct applicable to their managerial duties within of the context and also sign the Individual Codes of Conduct. This commits them to support and develop systems that facilitate the implementation of this action plan and maintain a GBV-free, child-safe and conflict-free work environment. These responsibilities include but are not limited to:

Mobilization

1. Establish a GBV/SEA and CAE Compliance Team (GCCT) from the contractor's and consultant's staff to write an Action Plan that will implement the GBV and CAE Codes of Conduct.
2. The Action Plan shall, as a minimum, include the
 - i. Standard Reporting Procedure to report GBV/SEA and CAE issues through the project Grievance Redress Mechanism (GRM);
 - ii. Accountability Measures to protect confidentiality of all involved; and,
 - iii. Response Protocol applicable to GBV survivors/survivors (including access to support coping and post-trauma management strategies) and perpetrators.
 - iv. Engagement of the services of social service providers (NGOs) with requisite skill in the prevention and management of GBV/SEA and CAE.
3. Coordinate and monitor the development of the Action Plan and submit for review to the Ogun State Economic Transformation Project (OGSTEP) safeguards teams, as well as the World Bank prior to mobilization.
4. Update the Action Plan to reflect feedback and ensure the Action Plan is carried out in its entirety.
5. Provide appropriate resources and training opportunities for capacity building so members of the GCCT feel confident in performing their duties. Participation in the GCCT will be recognized in employee's scope of work and performance evaluations.
6. Ensure that contractor, consultant and client staffs are familiar with the OGSTEP GRM and that they can use it to anonymously report concerns over GBV/SEA and CAE.
7. Hold quarterly update meetings with the GCCT to discuss ways to strengthen resources and GBV/SEA and CAE support for employees and community members.
8. In compliance with applicable laws and to the best of your abilities, prevent perpetrators of sexual exploitation and abuse from being hired, re-hired or deployed. Use background and criminal reference checks for all employees.
9. Ensure that when engaging in partnership, sub-grant or sub-recipient agreements, these agreements
 - a) incorporate this Code of Conduct as an attachment;
 - b) include the appropriate language requiring such contracting entities and individuals, and their employees and volunteers to comply with this Code of Conduct; and
 - c) expressly state that the failure of those entities or individuals, as appropriate, to take preventive measures against GBV and CAE, to investigate allegations thereof, or to take corrective actions when GBV and/or CAE has occurred, shall constitute grounds for sanctions and penalties.

Training

1. All managers are required to attend an induction manager training course prior to commencing work on site to ensure that they are familiar with their roles and responsibilities in upholding the GBV/SEA and CAE Codes of Conduct.
2. Provide time during work hours to ensure that direct recruits attend the mandatory OGSTEP-facilitated induction training which covers GBV/SEA and CAE training required of all employees prior to commencing work on site.
3. Ensure that direct reports attend the monthly mandatory refresher training course required of all employees to combat increased risk of GBV/SEA and CAE during civil works.

4. Managers are required to attend and assist with the NGO-facilitated monthly training courses for all employees. Managers will be required to introduce the trainings and announce results of consequential evaluations.
5. Collect satisfaction surveys to evaluate training experiences and provide advice on improving the effectiveness of training.

Prevention

1. All managers and employees shall receive a clear written statement of the company's requirements with regards to preventing GBV/SEA and CAE in addition to the training.
2. Managers must verbally and in writing explain the company and individual codes of conduct to all direct recruits.
3. All managers and employees must sign the individual 'Code of Conduct for GBV and CAE', including acknowledgment that they have read and agree with the code of conduct.
4. To ensure maximum effectiveness of the Codes of Conduct, managers are required to prominently display the Company and Individual Codes of Conduct in clear view in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas, health clinics.
5. All posted and distributed copies of the Company and Individual Codes of Conduct should be translated into the appropriate language of use in the work site areas (ex. Yoruba, Mandarin Chinese).
6. Managers will explain the GRM process to all employees and encourage them to report suspected or actual GBV/SEA and/or CAE.
7. Managers should also promote internal sensitization initiatives (e.g. workshops, campaigns, on-site demonstrations etc.) throughout the entire duration of their appointment in collaboration with the GCCT, service providers and in accordance to the Action Plan.
8. Managers must provide support and resources to the GCCT and service provider NGOs to create and disseminate the internal sensitization initiatives through the Awareness-raising strategy under the Action Plan.

Response

1. Managers will be required to provide input, final decisions and sign off on the **Standard Reporting Procedures and Response Protocol** developed by the GCCT as part of the Action Plan.
2. Once signed off, managers will uphold the **Accountability Measures** set forth in the Action Plan to maintain the confidentiality of all employees who report or (allegedly) perpetrate incidences of GBV/SEA and CAE (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law).
3. If a manager develops concerns or suspicions regarding any form of GBV/SEA or CAE by one of his/her direct recruits, or by an employee working for another contractor on the same work site, s/he is highly encouraged to report the case using the identified reporting mechanism.
4. Once a sanction has been determined, the relevant manager(s) is/are expected to be personally responsible for ensuring that the measure is effectively enforced, within a maximum timeframe of **14 days** from the date on which the decision was made.
5. Managers failing to comply with such provision can be in turn subject to disciplinary measures, to be determined and enacted by the company's CEO, Managing Director or equivalent highest-ranking manager. Those measures may include:
 - i. Informal warning
 - ii. Formal warning
 - iii. Additional Training
 - iv. Loss of up to one week's salary.
 - v. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
 - vi. Termination of employment.
6. Ultimately, failure to effectively respond to GBV/SEA and CAE cases attributable to contractor personnel within or beyond the project's influence area by the contractor's managers or CEO may provide grounds for legal actions by governmental authorities and client PIU.

I do hereby acknowledge that I have read the foregoing Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to GBV and CAE. I understand

that any action inconsistent with this Code of Conduct or failure to take action mandated by this Code of Conduct may result in disciplinary action.

FOR THE EMPLOYER

Signed by _____

Title: _____

Date: _____

3. Code of Conduct for Contractors (Employee's Version)

CODE OF CONDUCT FOR CONTRACTOR STAFF GENDER BASED VIOLENCE (GBV), SEXUAL EXPLOITATION & ABUSE (SEA), CHILD ABUSE/EXPLOITATION FOR INDIVIDUAL EMPLOYEE

I, _____ (*name of employee*), acknowledge that preventing Gender-based Violence (GBV), Sexual Exploitation & Abuse and Child Abuse/Exploitation (CAE) are important. GBV/SEA or CAE activities constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or termination of employment. All forms of GBV or CAE are unacceptable either on the work site, neighbouring project communities, or at worker's camps. Prosecution of those who commit GBV/SEA or CAE will be pursued as appropriate according to applicable laws. I also acknowledge the need to maintain peaceful relationships and interactions with residents of project areas.

Specifically, I agree that while working on projects of the Ogun State Agricultural Production and Industrialisation Project (OGSTEP), I will:

- i. Maintain conflict-free relationships with residents of project areas *when such relationships and interactions become necessary.*
- ii. Consent to police background check.
- iii. Treat women, children (persons under the age of 18), and men with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
- iv. Not use language or behaviour towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- v. Not participate in sexual activity with children—including grooming or through digital media. Mistaken belief regarding the age of a child and consent from the child is not a defence.
- vi. Not engage in sexual favours or other forms of humiliating, degrading or exploitative behaviour.
- vii. Not have sexual interactions with members of the communities surrounding the work place and worker's camps that are not agreed to with full consent by all parties involved in the sexual act. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex—such sexual activity is considered “non-consensual” within the scope of this Code.
- viii. Attend and actively partake in training courses related to HIV/AIDS, GBV and CAE as requested by my employer.
- ix. Report through the GRM or to my manager suspected or actual GBV and/or CAE by a fellow worker, whether in my company or not, or any breaches of this code of conduct.

With regard to children under the age of 18:

- x. Wherever possible, ensure that another adult is present when working in the proximity of children.
- xi. Not invite unaccompanied children into my home, unless they are at immediate risk of injury or in physical danger.
- xii. Not sleep close to unsupervised children unless absolutely necessary, in which case I must obtain my supervisor's permission, and ensure that another adult is present if possible.

- xiii. Use any computers, mobile phones, or video and digital cameras appropriately, and never to exploit or harass children or to access child pornography through any medium (see also “Use of children’s images for work related purposes”).
- xiv. Refrain from physical punishment or discipline of children.
- xv. Refrain from hiring children for domestic or other labor which is inappropriate given their age or developmental stage, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury.
- xvi. Comply with all relevant local legislation, including labour laws in relation to child labour.

Use of children’s images for work related purposes

When photographing or filming a child for work related purposes, I must:

- xvii. Before photographing or filming a child, assess and endeavour to comply with local traditions or restrictions for reproducing personal images.
- xviii. Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.
- xix. Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
- xx. Ensure images are honest representations of the context and the facts.
- xxi. Ensure file labels do not reveal identifying information about a child when sending images electronically.

I understand that it is my responsibility to use common sense and avoid actions or behaviour that could be construed as GBV or CAE or breach this code of conduct. I do hereby acknowledge that I have read the foregoing Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to GBV and CAE. I understand that any action inconsistent with this Code of Conduct or failure to take action mandated by this Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signed by _____
(Employee)

Title: _____
Date: _____

Signed by _____
(Employer/Manager)

Title: _____
Date: _____