



**Environmental Management Plan (EMP)  
for Kwae and Okumaning Plantation Estates**

EXTRACT

**Final Report**



**COMPANY INFORMATION**Registered Name of Company: **Ghana Oil Palm Development Company Limited**Type of Undertaking: **Agro-Industrial**Head of the Organization: **The Managing Director**Address for Correspondence: **c/o P O Box M428, Accra**Tel. No.: **054 43 35 761** Fax No.: **0302 202670**E-mail: [info@gopdc-ltd.com](mailto:info@gopdc-ltd.com)Contact Person: **Mariama Diallo**Position: **Health Safety Environment Manager**Location of UndertakingTown: **Kwae** District: **Kwaebibirem**Region: **Eastern Region**Zoning Status: **Rural****SHE Committee members as at December 2016**

No	Name	Department	No	Name	Department
1	Gert Vandersmissen	Managing Director	11	Andrews Yeboah	HSE rep
2	Eugene Sarpong	Industrial Relation officer	12	Wilson Amoah	Okumaning Agric - Div Head
3	Mariama Diallo	HSE Manager	13	Justice Tenkorang	Transport
4	Richard Asare	Security Manager	14	Bashir Manu	Community Relation Officer
5	Helene Livingstone	Junior Agronomist	15	Prince Oheneba	Clinic Supervisor
6	Gilbert Amenuvor	HSE- officer	16	Wilson Claude	Compound supervisor
7	Charles Danso	R&D supervisor	17	Isaac Appiah	Workshop/ Civil
8	Addo Edward	Kwae Agric-Divhead	18	Joseph Quaye	Industrial Unit – Quality Officer
9	Emmanuel Wiafe	Estate Manager Okumaning	19	Evans Tenkorang	Industrial Unit – Utility Supervisor
10	Samuel Ntow	Estate Manager Kwae	20	Kwame Sarpong	Industrial Unit – Refinery Supervisor

## EXECUTIVE SUMMARY

### The Company

GOPDC is an agro-based state enterprise company which was set up in 1975 as Ghana Oil Palm Development Corporation. It was incorporated in 1976 and the existing plantation in Kwae was established in phases from 1977 and commenced production in 1982. The company was registered as a limited liability company on December 6 1985 and has a registration number of 28,602 from the Registrar General's Department. The company was also registered with the Ghana Standards Board on July 25 2007 with registration number: **GSB/DID/IND/07/04**.

The main objectives of the company include diversifying agricultural production through the introduction of oil palm cultivation. The company was specifically mandated among other things to:

- Establish and operate a viable nucleus oil palm plantation;
- Construct and operate a palm oil mill; and
- Operate a smallholder/outgrower scheme with credit facilities for farmers.

GOPDC has about 21,000 hectares of oil palm plantations at its Kwae and Okumaning estates in the Kwaebibirem District of the Eastern Region of Ghana, of which about 13,000 ha have been developed for about 7,000 outgrowers. In total, there are over 2,900,000 oil palm trees spread over a radius of 30 km, creating a secured income for over 50,000 people.

GOPDC supports the communities it operates in, not only through the results from its business operations, but through investment in education, health and the environment which are essential factors in social development with the aim of improving the living standards for the majority of the people.

GOPDC employs a total work force of about 2,976 persons as described in **Table 1-1**. There are 24 management staff, 70 senior staff, 67 junior staff and 1,827 individuals are employed as casual workers i.e. contract or seasonal workers.

### Relevant Legal Provisions

The relevant national and international laws and regulations to guide GOPDC in environmental resource management, pollution control and worker health and safety include:

#### Ghanaian National Laws and Regulations

- Ghana Investment Promotion Centre Act 1994, Act 478;
- Environmental Protection Agency Act 1994, Act 490;
- Environmental Assessment Regulations 1999, LI 1652;
- Fees and Charges (Amendment) Instrument 2015 (L.I. 2228);
- Water Resources Commission Act 1996, Act 522;
- Water Use Regulations 2001, LI 1692;
- Forestry Commission Act 1999 (Act 571);
- Wildlife Conservation Regulations 1971, LI 685;

- Administration of Lands Act, 1962, Act 123;
- State Lands Act, 1962 Act 125;
- Effluent Quality Discharge Guidelines;
- National Ambient Air Quality Guidelines;
- National Ambient Noise Level Guidelines; and
- Local Government Act 1993, Act 462.
- The Labour Act 2003, Act 651;
- Factories, Offices and Shops Act 1970, Act 328;
- Fire Precautions (Premises) Regulations 2003, LI 1724;
- Children's Act, Act 560, 1998;
- Workmen's Compensation Law, 1987;
- Fair wages and Salaries Commission Act, Act 737 (2007);
- National Health Insurance Act (2003);
- National Health Insurance Regulations, LI 1809 (2004);
- Social Security Law, PNDCL 247 (1991);
- Children's Act, Act 560 (1998);
- Domestic Violence Act, Act 732 (2007);
- National Pensions Act, Act 766 (2008);
- Public Holidays Act, Act 601 (2001);
- Labour Regulations, LI 1833 (2007); and
- Human Trafficking Act, Act 694 (2005).

#### International Laws

- United Nations (UN) Convention on Biological Diversity (1992);
- International Labour Organization (ILO) Convention 169 (1989) on Indigenous and Tribal Peoples - Articles 13-19;
- UN Declaration on the Rights of Indigenous Peoples (2007) - Articles 25, 26;
- ILO Convention 169 (1989) on Indigenous and Tribal Peoples Indigenous and Tribal Peoples - Articles 6-9;
- UN Declaration on the Rights of Indigenous Peoples (2007) - Articles 10, 11(2), 19, 28(1), 29(2) and 32(2); and
- Convention on the Elimination of All Forms of Racial Discrimination, International Covenant on Economic, Social and Cultural Rights, Inter-American Human Rights System.
- ILO Convention 29 (1930) Forced Labour - Article 5
- ILO Convention 105 (1957) Abolition of Forced Labour - Article 1
- ILO Convention 138 (1973) Minimum Age - Articles 1-3
- ILO Convention 182 (1999) Worst Forms of Child Labour - Articles 1-7
- UN Declaration on the Rights of Indigenous Peoples (2007) - Articles 17(2), 21, 22(2)
- ILO Convention 87 (1948) Freedom of Association and Protection of Right to Organise - Articles 2- 11
- ILO Convention 98 (1949) Right to Organise and Collective Bargaining - Articles 1-4
- ILO Convention 141 (1975) Rural Workers' Organisations - Articles 2-3
- ILO Convention 100 (1951) Equal Remuneration - Articles 1-3
- ILO Convention 111 (1958) Discrimination (Employment and Occupation)
- UN Declaration on the Rights of Indigenous Peoples (2007) - Articles 2, 8(2e), 9, 15(2), 16(1), 21(2), 22, 24(1), 29(1), 46(3)

- ILO Convention 97 (1949) Migration for Employment - Articles 1-9
- ILO Convention 143 (1975) Migrant Workers (Supplementary Provisions) - Articles 1- 12
- ILO Convention 110 (1958) Plantations - Articles 5- 91
- ILO Convention 184 (2001) Safety and Health in Agriculture - Articles 7- 21
- Stockholm Convention on Persistent Organic Pollutants (2001) - Articles 1-5
- FAO International Code of Conduct on the Distribution and Use of Pesticides (1985, Revised 2002) - Article 5
- UN Declaration on the Rights of Indigenous Peoples (2007) - Articles 21(1), 23, 24, 29(3)
- Rotterdam Conventions on Prior and Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (1998) - Articles 1, 5 and 6

### **Raw Material Types, Annual Usage, Source and Packaging Forms**

The primary raw materials used by GOPDC for the oil palm plantation development are dry seed nuts, germinated oil palm seeds, polythene bags for seedlings, soil and agrochemicals. The seeds are delivered in plastic bags. Other raw materials used in nursery include wire meshing and agrochemicals such as fertilizers, fungicides, herbicides and insecticides. Management ensures that all agrochemicals procured and used are neither categorized as Type 1A or 1B by the World Health Organisation, nor listed by the Stockholm or Rotterdam Conventions.

### **Resource Utilisation**

#### Oil Palm Plantation Development

Production is mainly from the nursery and main plantation.

#### *Nursery*

In 2015, about a total of 343,055 germinated oil palm seeds were nursed in the pre-nursery at both Kwae and the Okumaning nursery. 345,186 and 350,000 seedlings were nursed in 2014 and 2013 respectively.

About 279,145 seedlings were transplanted from the pre-nursery to the main nursery from Kwae and Okumaning in 2015 while 172,054 seedlings were successfully transplanted to the field from the main nursery.

#### Rubber Plantation Development

At the Kwae nursery, about 42,354 seeds of rubber were nursed of which 35,295 were successfully grafted in 2015. In 2014, about 360,000 seeds of rubber were nursed of which 159,391 were successfully grafted. In 2013, about 280,000 seeds of rubber were nursed, of which 102,340 seedlings were successfully grafted.

#### Fuel Consumption

At the Kwae estate fuel is stored in three underground storage tanks at a fuel service station near the Administration Building. The management of the fuel service station has been outsourced to Total Ghana Limited. Two of such tanks of capacities 27,000 liters (for diesel) and 13,500 liters (for petrol) are at the service station and the remaining tank of capacity 25,000 liters (for diesel) is at the Mill.

### Water

Water used in the plantation activities at the Kwae estate is obtained from the 4no. out of 13no. boreholes within the concession. Water supply for the Okumaning estate is obtained from 2no. boreholes and 4no. hand dug wells.

### **Releases into Environmental Media**

The area is prone to heavy rains, therefore the major release into the surface water environment, is by runoff carrying sediment materials as well as residual or spent agro-chemicals. The emission into the air is mainly from dust generated from the movement of vehicles within the plantation and the site camp. Exhaust fumes from vehicles and the standby generators is minimal as due to relatively small quantity resulting in easy dispersion by air. The wastes released onto land include residual agro-chemicals, agrochemical containers and polythene bags from the nursery.

### **Hazards in the Working Environment**

The hazards associated with GOPDC's operations are summarized as follows:

- Fire risks;
- Injury and worker health risk;
- Noise generation; and
- Exhaust and dust emissions.

### **Current Environmental Management Practices**

#### Compliance with Statutory Requirements

##### *Environmental Management Plan*

Ghana Oil Palm Development Company Limited (GOPDC) is duly registered with the Environmental Protection Agency under Registration Number EPA/EMP/EMI 573. The operation of GOPDC at both Kwae and Okumaning are covered by Environmental Permit No. EPA/EMP/CA 398/01/10, from 19 February 2014 to 18 February 2017. The submission of this updated EMP is a pre-requisite for the renewal of its Environmental Permit.

##### *Annual Environmental Reporting*

Annual environmental report documenting resource utilisation, waste generation and management measures, occupational health and safety issues and measures taken, as well as major environmental challenges and planned activities from all operations of GOPDC (industrial and plantation), are submitted annually to the EPA since 2003.

##### *Environmental Monitoring Returns*

In accordance with the EPA Act 1994, Act 490, Section 12(1) and the Environmental Assessment Regulation, LI 1652 of 1999, and its EMP Permit Conditions, GOPDC submits environmental monitoring returns to the EPA on quarterly basis for its environmental monitoring programme comprising effluent discharges, ambient air quality, ambient noise levels, flue gas emission, drinking water quality, surface water quality and biodiversity monitoring.

### Water Use Permit

GOPDC has obtained a water use permit, dated 18 January 2016, from the Water Resources Commission to abstract groundwater from thirteen (13) boreholes at an annual rate of 650,000 m<sup>3</sup> for a term of three (3no.) years, subject to renewal. The permit is due to expire 17 January 2019.

### Raw Material Handling, Storage, and Loss Control

The raw materials used by GOPDC for the oil palm plantation development, at Kwae and Okumaning, are dry seed nuts, germinated oil palm seeds, rubber seeds, polythene bags for seedlings, prepared soil, agrochemicals and wire meshing. Polythene bags are kept in a warehouse/store room. The prepared soil is kept outdoors at the pre-nursery and nursery area. The wire meshing is kept in a store room at the nursery area.

### Effluent/Wastewater Management

Wastewater generated from the operations at the plantation is presently limited to sewage from the use of sanitary facilities and are collected in a septic pit. Small amounts of wastewater is also generated from the chemical mixing shed, but these are confined to the area close to the mixing shed and gradually seep into the ground. The wastewater is the result of the use of water hose to fill the gallons containing the chemicals. The main tap will need to be closed after filling each container and reopened to fill the next. Management is considering closed mixing and loading systems to prevent chemical spills and subsequent seeping into the ground.

### Gaseous Emissions Management

Dust emissions are controlled by regular dampening of the streets within the Estates, especially during the dry season. Air quality within the plantation were within the National Ambient Air Quality (NAAQG).

### Solid/Hazardous Waste Management

The primary solid wastes generated produced from the plantation development process are empty chemical containers/packaging materials and used polythene (nursery) bags. The empty agrochemical containers/packaging materials are temporary kept in a store room adjacent to the chemical room and returned to the suppliers or sold to waste recycling companies such as Louis Dreyfus Commodities and Presank for their appropriate management measure. The estimated quantity of agrochemical containers disposed in 2016 was 2,643.8 kg.

Other waste generated include refuse from the operation of the offices, which are disposed at the refuse dump sites in Kwae and Okumaning. Each of the refuse dumps is constructed as a trench/pit in which the refuse is deposited and burnt as soon as possible. One person is permanently assigned to the refuse dump to ensure that it is properly maintained and used.

### Storm Water/Run-off Management

Culverts and side drains have been provided throughout the estates to channel rainwater runoff and prevent erosion. The general vegetative cover growth in the plantation area has also been established, maintained and preserved to stabilize the soil and further control erosion from the rainwater runoff.

### Energy Management

Good energy management is an effective way to control environmental pollution and reduce costs. Energy management measures include:

- Maintenance of equipment;
- Education on energy use efficiency
- Handing over fuel management to Total Petroleum Ghana Limited for efficient management

### Water Usage and Management

The main management measures for water at Kwae and Okumaning plantations are through the control of losses in the water supply of the supply system and measures for the management of water consumption levels such as monitoring of water consumption levels and the control of consumption rates.

### Maintenance of Estate Roads

The company maintains 415km of feeder roads, including the access roads within its plantations. The maintenance of these roads make them accessible to the farmers to deliver their fruits to the mill. They have also opened up the various communities to the rest of the country. The roads slope on the sides to carry away storm water and prevent flooding and erosion. The road surface is scheduled to be graded biannually by the company's road maintenance team. However any detected deterioration is promptly fixed by the maintenance team to make them accessible all year round.

### Grievance Management

A committee comprising representatives from the nearby communities, land owners, farmers and management staff GOPDC has been constituted to attend to the social and environmental issues emanating from the implementation of the project. Community complaints are presented to the committee, who in turn discuss with Management. GOPDC has developed its Grievance Procedure Policy which outlines the employee's right to fair and just treatment and the right for employees to raise valid complaints and concerns. It further provides the process available for the employee to make his or her grievances known and addressed. A database of all complaints received and the extent to which they have been addressed has been compiled by management.

## **Current Occupational Health and Safety Issues**

### Fire Risk Management

GOPDC is operating in line with the RSPO principles, criteria, indicators and guidelines, therefore burning is not part of the land preparation. The risks of plantation fires are mainly from nearby farms on the periphery of the plantation. This risk is greatest in the dry season and at the start of rains when farms are being prepared for the planting. Other possible sources of fire include deliberate ignition by a saboteur, accidental fire such as lightning, explosion, chemical, mechanical, electrical, etc. A fire team is established and regular trainings are held and facilitated by the staff of the Kade office of the Ghana National Fire Service.



### Accident Risk Management

All accidents/incidents occurring are recorded, investigated and analysed to determine the cause and cost of accidents/incidents with respect to man-days and clinic cost. Accident prevention and investigation procedures are defined in a policy document. There is no accident/incident notice board to make the workers aware of their overall performance with regards to safety in the workplace. Workers are therefore not completely aware of the status of injuries and accidents.

### Use of Personal Protective Equipment

Management of GOPDC has consistently committed huge financial resources to the provision of various and appropriate Personal Protective Equipment (PPE) to workers at the plantations, and its entire workforce, in line with the company's policy on Occupational, Health and Safety and with the Factories, Offices and Shops Act 1970 (Act 328). The ESO in collaboration with the supervisors decide on the specifications and quantity of the PPE items required, which are then procured by the ESO. An amount of GH¢234,428.63.00 was spent on safety equipment for all workers in 2015, and GH¢277,189.97 and GH¢317,500.00 was spent in 2014 and 2013 respectively.

### Provision of Warning Notices and Signage

Some signage has been provided within the plantations, especially to indicate power lines. There is however limited use of signage for speed limits within the estate.

### Security

There are 5 security gates in the Kwae concession and 3 at Okumaning estate which ensure that only authorized persons are allowed entry to the site. The provision of security has been contracted to Kenthouse security.

### Transport Management and Safety

Field workers are transported every morning from the various communities to the plantation site. Workers are transported early morning in either buses from the various communities to the field and back after work. Workers do not pay for this service. Some of the workers have also been provided with bicycles to assist with transportation to the plantations. Some of the measures in place for the management and safety of transport include:

- Routine servicing and maintenance of vehicles
- Control of over speeding; and
- The use of only qualified drivers

### First Aid and Medical Care

The most common illnesses normally handled at the GOPDC clinic include malaria, respiratory tract infections and body injuries/cuts. The clinic has an ambulance at its disposal. Very serious cases are referred to the St. Dominic Hospital at Akwatia. Records from the health centers indicate that about 1,005 cases were treated per month in 2016. It must be noted all dependents of workers are also treated by the clinic. Measures in place to provide medical care include:

- Medical Screening

- Provision of First Aid
- Insurance policy

### Corporate Responsibility

#### *Occupational Health and Safety Policy*

GOPDC has a clearly stated and written corporate occupational health and safety policy in place, as well as policy objectives that guides its operations. Management has displayed an A4-sized version of the policy statement on major notice boards and distributed the document to workers. A written Occupational Health & Safety policy manual with details of responsibilities has also been prepared. Other health and safety related policies include the following:

- Drug policy;
- Alcohol Policy;
- Fire Policy; and
- Sexual harassment Policy.

#### *Fire Permit*

The company has secured a fire permit from the Ghana National Fire Service, to cover its operations as per the Fire Precautions (Premises) Regulations 2003, LI 1724.

#### Safety, Health and Environment (SHE) Committee

GOPDC has a 20 member high profile Environmental Committee that sees to the implementation of environment, occupational safety and health programmes. The Company has a scheduled officer in charge of environmental management and safety designated as the Health, Safety and Environment Manager.

#### The Role of Employees

The staff, with guidance and supervision from the SHE Committee and the HSE, are given the responsibility, to ensure a safe working environment by complying with the standard operational procedures of the company and, in the event of an emergency, carry out the necessary response measures to contain or eliminate the danger.

#### Health and Safety Education and Training

GOPDC has developed "Estate Rules and Instructions" and standard "Work Procedures" to guide all employees in the responsible prosecution of their assignments. An Occupational Health & Safety policy manual, with details of responsibilities, has been prepared for implementation by management. Initial training in machinery handling and safe working procedures is given to all new drivers and machinery operators to provide them with them the necessary basis for ensuring safety in the working environment.

#### Hygiene and Sanitation Practices

Adequate toilet facilities have been provided for workers at the mill, maintenance workshop, refinery office/plant, as well as haulage truck team (drivers and assistants).

### **Environmental and Safety Action Plans**

In addition to the current environmental management practices the following measures will be implemented in the coming years under this EMP implementation period.

#### Environmental action plans

- Compliance with legislation
  - Annual Environmental audit
  - Annual Environmental Report
  - Renew water use permit
  - Submission of environmental monitoring returns
  - Acquisition of Environmental Permit for Rubber project and palm replanting
  - Update of EMP
  - Environmental Monitoring
  - Environmental monitoring as described under Chapter 9 – Programme to meet requirements
- Raw Materials Handling and Storage
  - Keep records on seed nuts and agrochemical usage
  - Extension of the capacity of the agrochemical building
- Gaseous Emissions Management
  - Carry out regular road dampening exercise within the Kwae and Okumaning estates, as well as roads that pass through local communities
- Solid Waste Management
  - Return of empty agrochemical containers/packaging and used polythene bags materials to suppliers/ contractors.
  - Implement good housekeeping practices at the waste dump site to avert creating a habitat for mosquitoes and other vermin
- Storm Water/Runoff Management
  - Maintain the vegetation in the buffer zone along the water bodies to ‘sieve off’ sediment from runoff that will enter them
  - Periodic inspection of drains, especially immediately following significant rainfall events, to remove accumulated sediment and debris
- Energy Management
  - Maintaining and analysing monthly records on the consumption levels of fuel
  - Continue with routine vehicle maintenance/servicing of vehicles after every 5,000 km travelled and every 250 hours for heavy-duty machines
- Water Management
  - Monthly records on water consumption from all water meters installed will be maintained and analysed
  - Daily check on boreholes
  - Quarterly cleaning and chlorination of tanks
  - Biennial Borehole rehabilitation
  - Installation of water meter at for booster station at the Kwae nursery
- Ecological Management
  - Maintenance of conservation corridors
  - Habitat restoration of patches of degraded forest
  - Environmental education for workers and communities

- plant trees within the buffer zones along streams in estates
- HCVF Assessment for new planting
- Maintenance of Estate Roads
  - Continue with the schedule for bi-annual road maintenance
- Awareness creation and Environmental Training
  - Annual dissemination of EMP at three levels (junior workers, supervisors and managers)
  - Awareness Creation and Training of Management and all staff in cleaner production techniques with specific reference to the oil palm industry including energy and water conservation measures.
- Grievance Management
  - Implement its Grievance Procedures Policy
  - Education of all stakeholders on both formal and informal grievance management procedures
  - Document all grievances received and the extent to which they have been resolved

#### Health and safety action plans

- Compliance with legislation
  - Renewal of fire permit
  - Display of the Occupational Health and Safety Policy on A3 format
- SHE Committee
  - Quarterly meetings of the SHE Committee
  - Annual self-review and evaluation of SHE Committee
- Health and Safety Education and Training
  - Periodic awareness creation workshops/seminars for workers
  - Training programmes and awareness creation seminars
- Hygiene and Sanitation Practices
  - Provision of dust bins for residential area
  - Compaction of waste and spreading of soil at the waste dump
- Accident Risk Management
  - Introduce an accident/incident notice board
  - Record and analyze accidents per plantation operation
- Fire Risk Management
  - Maintaining adequate stock of firefighting equipment
  - Carry out fire protection and education campaigns for all workers and the nearby communities
- Personal Protective Equipment
  - Keep permanent stock of certain PPEs in stores for prompt replacement and for new employees
  - Maintain documentation on suppliers of PPE
  - Maintain documentation on the necessary PPE for the various tasks
  - Maintain communication system from plantation, to supervisors to ESO for all to be apprised of the PPE needs and efficiency
  - Keep database on the distribution of PPE
- Provision of warning signage
  - Provision of more picture/symbolic safety signage

- Provision of more road signs will be provided and replacement of existing non-reflective ones
- Transport management and safety
  - Education of drivers, as well as the FFB suppliers and contract workers on the safety precautions instituted and the dangers of over speeding
  - Mandate security men to report drivers involved in careless driving over speeding
  - Employ only drivers with the requisite class of license as prescribed by the DVLA
- Medical Care and Monitoring
  - Medical Screening

### **Social Actions**

- Payment of compensations
  - Payment of compensation and list of claimants due for payment will be advertised on Communities Notices Board at Aboabo, Kusi Akuamoah.
  - Payment of compensation.
- Facilitate smallholdings and outgrower schemes
  - Community engagement in the form of durbar, meetings and focus group discussion on merits and demerits of the schemes.
  - Facilitate survey and implementation of OG scheme.
- Employment opportunities for affected inhabitants
  - Recruit affected inhabitants, e.g. for plantation work.
- Provision of infrastructure in the surrounding communities
  - Establishment of Community Consultative & Development Committees in surrounding communities.
  - Organize capacity building training for the established committees.
  - Facilitate payment of GOPDC contributions for community development projects.
  - Facilitate community participation and decision in project development.
  - Facilitate road maintenance for movement.
- Grievance procedure
  - Maintain database on the grievances received.
  - Build capacity to respond on grievances received.
- Provide adequate community consultations on GOPDC's social responsibilities
  - Community engagement through established Community Consultative & Development Committees in form of durbar, meetings and focus group discussion.
  - Sensitisation on community grievance procedures (including land acquisition grievances) and feedback.
- Livelihood restoration
  - Livelihood survey and analysis in Kwae
  - implementation of livelihood restoration measures.
  - Train beneficiaries in livelihood restoration activities.
  - Develop indicators for monitoring of the livelihood restoration measures.
- Health Care Provisions
  - Spraying against mosquito's in Kwae.
  - Clinic installation at Kwae estate
  - First aid center at Okumaning estate

- Malaria and HIV/AIDS prevention and sensitisation programme for unit committee, water and sanitation group, community women groups and schools.
- Child Labour Program
  - Sensitization of surrounding communities on the negative impact of child labour. (Focus on girl child education in outgrower districts.)

**Benefits of EMP Implementation**

- Efficient resource utilization;
- Waste prevention, minimization, recycling and reuse;
- Availability of management tools to help achieve environmental and worker health and safety aspirations;
- Increased worker awareness of the Occupational Health and Safety policy of GOPDC;
- Promotion of compliance with environmental and safety laws and regulations;
- Projection of good public image by recognition as environmentally friendly company; and
- Better relationship with the regulatory agencies like the EPA and Factories Inspectorate Department.

**Company commitment**

Management will commit an estimated amount of **GH¢1,268,100.00** to cover expenditures on safety and environmental issues over the three year period of the EMP implementation. This excludes compensation payments and 0.5% of its annual turnover for the provision of infrastructural facilities in the communities.

EXTRACT

## 12.0 CONCLUSIONS

GOPDC acknowledges that its activities and operations do impact on the environment, workers, customers and the public and is very mindful of its obligations towards the protection of the environment and ensure the health and safety of workers, customers and the community.

GOPDC will continue to invest in ensuring a safe environment that will assure sustainable business operations at the Kwae and Okumaning Plantations and will also continue to undertake their activities and operations in accordance with Ghanaian laws as well as international best practices governing development activities of this nature.

Management will continue to use its HSE policies to communicate its intentions and expectations to employees, contractors and stakeholders. The environmental and health/safety action plans outlined in this EMP as well as emergency response plans and incident reporting procedures will be implemented and monitored to ensure that HSE performance targets and objectives are achieved. The implementation of the EMP will cost the company about **GHC 1,268,100.00** for the three-year period.

EXTRACT