

9.1 OVERVIEW AND SCOPE

9.1.1 Introduction

This chapter describes the provisional Environmental Management Plan (EMP) for the Jubilee Phase 1 Development project. The elements of this provisional plan will be taken forward and incorporated into a comprehensive Jubilee Field EMP that will be used to deliver the project's health, safety and environmental (EHS) regulatory compliance objectives, lenders requirements (ie IFC Performance Standards) and other related commitments. The Jubilee Field EMP is a component of the Jubilee Joint Venture's overall Environment Health and Safety Management System (EHSMS).

The twelve key elements of the EHSMS outlined in *Chapter 2: Section 2.8.1* will be adopted by the Jubilee Joint Venture throughout the various project stages, including but not limited to installation, commissioning and operation. These elements will aid the Jubilee partners achieve consistency in the standards applied across various project components. Contracting parties to the JV partnership will be monitored on their implementation of these key elements in their activities.

The provisional EMP describes the structure and processes that will be applied to activities to check and monitor compliance and effectiveness of the mitigation measures to which the Jubilee JV has committed. In addition, the EMP will be used to monitor compliance with statutory requirements and corporate safety and environmental policies.

Tullow will monitor the implementation of key contractor parties to assess compliance with the provisional EMP through contractual mechanisms and day-to-day management. For example, the subsea installation will be undertaken by Technip and the FPSO will be operated by MODEC but both sub-contractors will report to Tullow. Tullow will have its own supervisory personnel on-board and the Ghanaian Government will have an oversight of the project through its various agencies.

With respect to the significant impacts identified by the EIA, the EMP provides the linkage between each significant impact (see *Chapter 5*), the relevant mitigation measures (see *Chapters 5 and 6*) and the monitoring approach (see *Chapter 7*). Further, through this EMP, significant impacts are referenced to:

- applicable regulatory requirements, lenders requirements and other commitments; and
- relevant operational controls (eg management best practices, construction and operation specifications, procedures, and work instructions).

9.1.2 *Objectives*

The objectives of the EMP are to:

- develop a commitments register to address legal and other requirements;
- promote environmental management and communicate the aims and goals of the EMP amongst the Jubilee JV;
- ensure that all workers, subcontractors and others involved in the project meet legal and other requirements with regard to environmental management;
- incorporate environmental management into project design and operating procedures;
- address concerns and issues raised in the EIA's stakeholder consultation process and those that will likely continue to arise during the project's lifetime;
- serve as an action plan for environmental management;
- provide a framework for implementing project environmental commitments (ie mitigation measures identified in the EIA); and
- prepare and maintain records of project environmental performance (ie monitoring, audits and non compliance tracking).

9.1.3 *Scope*

The EMP is intended to cover those activities described in this EIS as well as linking with the activities covered by the previous drilling EISs undertaken for the Jubilee project. It covers onshore and offshore project activities during drilling, completions, installation, commissioning, operations and decommissioning, and will be subject to thorough reviews prior to the commencement of activities to ensure completeness. The EMP does not cover activities related to equipment and facility fabrication being done outside of Ghana.

9.2 *GENERAL REQUIREMENTS*

9.2.1 *Introduction*

Requirements for an EMP and guidance on scope and application are given in Ghana environmental regulations and in lender performance standards. These are summarised below.

9.2.2 *Ghanaian Regulatory Requirements*

Requirements for an EMP are contained in the *Environmental Assessment Regulations of 1999*. Under Part II, Section 9, a 'provisional environmental management plan' is a required element of an EIS.

In Section 24, the Regulations further require:

(1) The person responsible for an undertaking in respect of which a preliminary environmental report or an environmental impact statement has been approved shall submit to the Agency an environmental management plan in respect of his operations within 18 months of commencement of operations and thereafter every 3 years.

Further:

(3) The environmental management plan shall be a document in such form as shall be determined by the Agency.

(4) The environmental management plan shall set out steps that are intended to be taken to manage any significant environmental impact that may result from the operation of the undertaking.

This document serves to satisfy the requirement for a provisional EMP. The need for any further documentation on the project's EMP (as per Section 24, Item 1) will be agreed with the EPA during the EMP development process.

9.2.3

Jubilee JV Requirements

The Jubilee JV has committed to governing the execution of the project following the expectations and operating philosophy of the EHSMS (see Chapter 2: Section 2.8.1 for the 12 key elements of the project EHSMS). The EHSMS has been built from Tullow's EMS and applies equally to project development and operational phases to ensure a seamless transition.

This EMP is intended to be consistent with the elements and expectations of the project EHSMS. This includes addressing key elements of the EHSMS including the application of risk management techniques throughout the project to protect the environment and employees, subcontractors and communities, and the establishment of environmental baselines and mitigation/ action plans.

Appropriate procedures, plans and programs will be implemented during the course of the project to ensure that these management expectations are met. These will be based on industry best practice and the Jubilee JV partners' own company EHS policies and standards.

The EHSMS will include the organisational structure, responsibilities, policies, procedures and practices, and resources. In the context of accepted international frameworks for quality and environmental management systems the EHSMS process can be summarised as follows (see Figure 9.1).

Plan

- define policies and objectives for environmental and social performance;
- identify environmental and social impacts and risks of the operations;
- develop mitigations and operational controls to address impacts and risks; and
- develop a management plan to achieve these objectives.

Do

- implement management plan; and
- implement mitigations and operational controls.

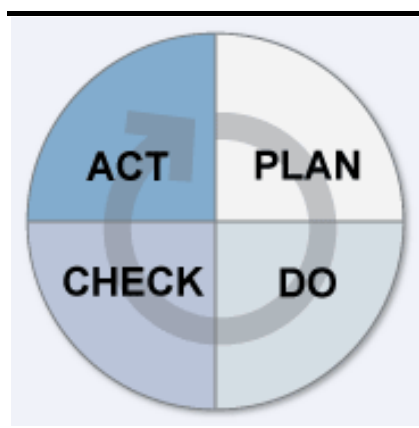
Check

- monitor performance against policies and objectives; and
- check that mitigations and operational controls are effective.

Act

- make corrections to plans, mitigations, or controls in response to performance monitoring or out of control events.

Figure 9.1 *Environmental Management Process*



IFC's Performance Standard 1 ⁽¹⁾ requires that the environmental management system be part of the client's overall management system for the project. It should include the organisational structure, responsibilities, policies, procedures and practices, and resources. Performance Standard 1 underscores the importance of on-going management of social and environmental performance to achieve continuous improvement.

The IFC requires that a management system be in place at the level where their investment is utilised. In this case, it is at the level of the project. It requires a plan for implementing the project-specific management programme developed through the social and environmental assessment.

(1)Performance Standard 1: Social and Environmental Assessment and Management Systems from IFC Performance Standards on Social and Environmental Sustainability

9.3 *PLANNING*

9.3.1 *Impact Assessment*

As part of the EHSMS, the project utilises impact assessment as a tool in the planning process. Impact assessment has been conducted for early drilling activities as well as for the development.

The project will continue to use impact assessment as a planning tool for any future development activities including significant changes, additional development phases, expansions, or ancillary projects.

9.3.2 *Project Commitments*

Through the project development and the EIA process, the project has made commitments to actions to manage or improve environmental and social performance. These commitments are not recommendations; they are binding commitments on the part of the project.

The commitments take a number of forms as summarised in Box 9.1 with the specific actions intended to address a particular environmental or social issue. The commitments are detailed in tabular form in *Chapter 6*. The commitments are organised by development stage and reference to the EIA, as applicable.

Box 9.1 *Types of Commitments*

Avoidance

During the planning phases, potential impacts to sensitive resources are identified. Where feasible, locations or processes can be changed during the planning or design phases to avoid impact to these areas.

Minimisation

Minimisation involves measures to reduce proposed impacts to a resource. Minimisation can include for example, vessels slowing down in the vicinity of marine mammals.

Management

Management commitments include development of plans and procedures for ensuring that measures to protect the environment actually take place and are of the desired standard of practice. Training is another commitment in this category.

Monitoring

Commitments to monitoring are primarily to ensure the above measures are working properly and delivering the desired (and anticipated) results.

Additionality

Additionality involves actions and contributions which are designed to provide a positive benefit. Examples include maximising Ghanaian content in employment, procurement of local goods and services, and dissemination of scientific data.

9.3.3 *Management Plans*

Provisional Environmental Management Plan

The goal of this EMP is to ensure full compliance with the project's policies and with mitigation, monitoring and other commitments made in the EIS. It outlines the actions necessary to attain this goal, and describes the means, and designation of responsibility required for compliance and conformance. The provisional EMP provides the link for implementation of mitigation and monitoring actions described in *Chapters 6 and 7*.

Project Environmental Management Plan

The Jubilee JV will develop a project-wide EMP combining the elements of this provisional EMP with other environmental and social performance requirements currently being implemented for the development.

9.3.4 *Related Management Plans*

The EHSMS also comprises a number of related detailed management plans and procedures that lay out the specifications for compliance with specific environmental and social elements and describes the plans and processes required for carrying out the necessary activities. Project management plans are outlined in *Table 9.1* with information on how these relate to the activities and impacts being discussed in the EIS, including reference to who has lead responsibility.

9.3.5 *Subcontractor Environmental Management Plans*

The project will engage subcontractors to carry out project activities. The contractors are responsible for performing all work:

- in compliance with relevant national and international EHS legislation and regulations, and with other requirements to which the project subscribes;
- in conformance with the project's EHSMS; and
- in accordance with contractual technical and quality specifications.

The project will also provide specifications for environmental compliance and performance (through this EIS and EMP and the associated plans) and, as a contractual requirement, the subcontractor will develop and provide to the project its own specific management plans demonstrating how they intend to comply with the stipulated requirements.

The subcontractors must also provide documentation detailing their plans for:

- implementing the measures required in the EIA and this EMP;
- local content;
- logistics; and
- community relations.

Table 9.1 Jubilee EMP Hierarchy of Key Plans

Plan Name	Includes	Plan Owner	Indicative timing
Jubilee Field EMP	Overarching plan linking all the other plans to the project EHSMS	EHS Manager	First Oil
Jubilee Field Environmental Monitoring Plan	Seabed monitoring, routine effluent and discharge monitoring and Marine Mammal Observation Programme	EHS Manager	3Q 2010
Waste Management Plan	Project-related waste handling procedures for hazardous and non hazardous solid wastes. Including chemical handling procedure and drilled cuttings and fluid disposal methods and procedures.	EHS Manager	2Q 2010
Emergency Response Plan	Accident and Incident Investigation and Reporting Procedure. Investigation process to determine accident root cause and feedback for process improvement or prevention	EHS Manager	1Q 2010
Oil Spill Contingency Plan	Spill preventative measures and spill response procedure	EHS Manager	2Q 2010
Helicopter Operations Plan, Marine Logistics Plan and Transport Management Plan	Transport risk assessment, water transport routes, overland routes, air routes, transport rules	Supply Chain Manager / Base and Logistics Manager	2Q 2010
Preventative Maintenance Plan	Maintenance procedures and description of the maintenance management system.	Production Operations Manager	3Q 2010
Marine Operations Plan	Tanker Vetting Procedure, Cargo Transfer Procedure & Fuel Oil Transfer Procedure. Ballast Water Management Procedure.	Asset Manager	2Q 2010
Corporate Social Responsibility (CSR) Management Framework and Plan	CSR and Community Investment Programme	Government Affairs and External Relations Manager	2Q 2010
Public Consultation and Disclosure Plan	Addressing interactions with community and other stakeholders, and the grievance procedure.	Government Affairs and External Relations Manager	1Q 2010
Land use and development plans	Aid District municipalities upgrade their land use and development plans.	Government Affairs and External Relations Manager	3Q2010
Human Resources Strategy and Plans	Local hiring, training and procurement programme and procedures.	Human Resources Manager	1Q 2010
Voluntary Principles on Security and Human Rights	Training of security near FPSO in Voluntary Principles on Security and Human Rights	EHS Manager	1Q 2010

The subcontractor management plans must conform to the requirements of the project's overarching plans. Subcontractor plans will be reviewed and approved by Tullow and incorporated into, and form part of, the project's overall EMP.

Contractors will be required to self-monitor against their plan and the contractor's compliance with the plan will be routinely monitored by Tullow directly or by third-parties. Contractors will be required to submit regular reports of monitoring activities and the project will review these on a regular basis. An external assurance process will be conducted on an annual basis, the results of which will be disclosed at completion of the process.

As a contractual requirement, the subcontractors are required to provide sufficient resources to manage EHS aspects of the work to be performed. This includes providing adequate resources to monitor compliance of next-tier subcontractors and a process for emergency stop-work orders in response to monitoring triggers.

9.4 *IMPLEMENTATION*

9.4.1 *Environmental Management Organisation*

Introduction

Tullow is committed to provide resources essential to the implementation and control of the EMP. Resources include the appropriate human resources and specialised skills. This section focuses on the overall approach for EHS management, on the structures of Jubilee JV and subcontractor EHS departments, and on the respective responsibilities of each department and their individual positions. *Table 9. 2* provides a summary of responsibilities for implementing the EMP.

Jubilee Unit Organisation

Tullow has been appointed the Jubilee Unit Operator and is ultimately responsible for the management and supervision of all project activities. Tullow has both EHS and Corporate Social Responsibility (CSR) departments with dedicated staff, competent on the basis of appropriate education, training, and experience. The Tullow management structure for EHS management is illustrated in *Figure 9.2*.

Supervision of subcontractor activities will be conducted by the Tullow technical team. This will be accomplished through management controls over strategic project aspects and interaction with subcontractor staff where project activities take place. The Tullow organization will be staffed at a level to allow for continuous effective supervision of subcontractor activities and work products.

The Tullow EHS/CSR departments will be headquartered in Accra, where staff overseeing commissioning and operations will be located. Staff will also be located in Takoradi to facilitate EHS oversight of site activities as well as to allow direct interface and access for stakeholders in the Western Region. These functions will manage the successful implementation of the EMP and the continuation of the stakeholder consultation process. During commissioning and operations, EHS staff will also be located offshore.

Table 9.2 *Environmental Management Organisation Roles and Responsibilities*

Position	Responsibility
<i>Jubilee JV Project Team</i> EHS Manager	Oversee and coordinate all activities pertaining to the EHS aspects of the project. Ensure delivery by the asset of its EHS and operational targets. Ensuring that the project and subcontractors operate in accordance with applicable regulatory environment, health and safety requirements and plans. Responsible for the execution of Emergency Response Plan execution including Oil Spill Contingency Plan. Ensure effective communication with all stakeholders.
Technical Managers including Production Operations Manager Project & Facilities Manager Well Engineering Manager	Technical aspects of the project including subcontractor supervision.
EHS / Environmental Advisor	Monitor implementation of environmental and social protection measures, and assist with technical input into oil spill response requirements.
Government Affairs and External Relations Manager / Corporate Social Responsibility Manager	Liaise with government regulators and other stakeholders including the public on the project's behalf. Responsible for the implementation of the PCDP. Employ Community Liaison Officers.
<i>Subcontractor</i> Project Manager	Responsible for subcontractor technical performance and compliance.
EHS Manager	Ensure that environment, health and safety regulatory requirements are met and that EMP requirements are properly implemented.

9.4.2

Training and Awareness

Tullow will identify, plan, monitor, and record training needs for personnel whose work may have a significant adverse impact upon the environment or social conditions. The project recognises that it is important that employees at each relevant function and level are aware of the project's environmental and social policy; potential impacts of their activities; and roles and responsibilities in achieving conformance with the policy and procedures.

This will be achieved through a formal training process. Employee training will include awareness and competency with respect to:

- environmental and social impacts that could potentially arise from their activities;
- necessity of conforming to the requirements of the EIA and EMP, in order to avoid or reduce those impacts; and
- roles and responsibilities to achieve that conformity, including with regard to change management and emergency response.

The EHS Manager is responsible for coordinating training, maintaining employee-training records, and ensuring that these are monitored and reviewed on a regular basis. The EHS Manager will also periodically verify that staff are performing competently through discussion and observation.

Employees responsible for performing site inspections will receive training by drawing on external resources as necessary. Training will be coordinated by the EHS Manager prior to the beginning of field activities. Upon completion of training and once deemed competent by management, staff will be ready to train other people.

Similarly the project will require that each of the subcontractors institute training programmes for its personnel. Each subcontractor is responsible for site EHS awareness training for personnel working on the job sites. The subcontractors are also responsible for identification of any additional training requirements to maintain required competency levels.

The subcontractor training programme will be subject to approval by the project and it will be audited to ensure that:

- training programs are adequate;
- all personnel requiring training have been trained; and
- competency is being verified.

9.4.3

Communication

Tullow will maintain a formal procedure for communications with the regulatory authorities through its project Public Consultation and Disclosure Plan (PCDP). The EHS Manager is responsible for communication of EHS issues to and from regulatory authorities. This is coordinated with the

project's Government Affairs Manager. The Project Director is kept informed of such communications. Pertinent information arising from such interactions will be communicated to subcontractors through the EHS Manager.

Whereas it is anticipated that the subcontractor EHS staff may interact with representatives from regulatory authorities on an informal, day-to-day basis regarding routine matters, the EHS Manager shall be the point of contact for formal communications. The EHS Manager will be responsible for communicating any pertinent information arising from such discussions to appropriate subcontractor through the technical department.

Meetings will be held, as required, between the Tullow EHS/CSR Department and the appropriate regulatory agency and community representatives to review EHS performance, areas of concern and emerging issues. Dealings will be transparent and stakeholders will have access to personnel and information to address concerns raised. The entire project organisation will be open to Ghana Government review and audit.

The External Affairs/CSR Manager is responsible for communications with the public and with public stakeholder organisations. Communications and community relations will follow formal written procedures to document these communications.

With regard to EHS issues, the External Affairs/CSR Manager is responsible for facilitating dissemination of information necessary to mitigate impacts through coordinating public notifications (eg meetings, media announcements, written postings) and through stakeholder interaction.

The project will maintain a written register of stakeholder interactions in line with the PCDP to effectively track communications so that commitments made to follow up actions can be tracked and implemented. This includes grievances that are tracked through the formal grievance procedure which will be administered by the CSR Manager. Grievances may be verbal or written and are usually either specific claims for damages/injury or complaints or suggestions about the way that the project is being implemented. When a grievance has been brought to the attention of the project team it will be logged and evaluated. The person or group with the grievance is required to present grounds for making a complaint or claiming loss so that a proper and informed evaluation can be made. Where a complaint or claim is considered to be valid then steps are required to be undertaken to rectify the issue or agree compensation for the loss. In all cases the decision made and the reason for the decision will be communicated to the relevant stakeholders and recorded. Where there remains disagreement on the outcome then an arbitration procedure may be required to be overseen by a third party (eg government official). Local community stakeholders will be informed on how to implement the grievance procedures.

9.4.4

Documentation

Tullow will control EHS documentation, including management plans; associated procedures; and checklists, forms and reports, through a formal procedure. The document control procedure will describe the processes that the project will employ for official communication of both hardcopy and electronic (through the internet) document deliverables. In addition, it will describe the requirement for electronic filing and posting and for assignment of a document tracking and control numbers (including revision codes).

The EHS Manager is responsible for maintaining a master listing of applicable EHS documents and making sure that this list is communicated to the appropriate parties. The EHS Manager is responsible for providing notice to the affected parties of changes or revisions to documents, for issuing revised copies and for checking that the information is communicated within that party's organisation appropriately.

The subcontractors will be required to develop a system for maintaining and controlling its own EHS documentation and describe these systems in their respective EHS plans.

9.4.5

Operational Control Procedures

Each potentially significant impact identified in the EIA will have an operational control associated with it that specifies appropriate procedures, work instructions, best management practices, roles, responsibilities, authorities, monitoring, measurement and record keeping for avoiding or reducing impacts. Operational controls are monitored for compliance and effectiveness on a regular basis through a monitoring and auditing procedure described in the EMP.

Operational control procedures will be reviewed and, where appropriate, amended to include instructions for planning and minimising impacts, or to at least reference relevant documents that address impact avoidance and mitigation. To be comprehensive, suitable, adequate, and effective, the EHSMS will ensure that operational controls for avoiding and minimising impacts are properly maintained for the project's life-cycle.

9.4.6

Emergency Preparedness and Response

Tullow has developed plans and procedures to identify the potential for and response to environmental accidents and health and safety emergency situations and for preventing and mitigating potentially adverse environmental and social impacts that may be associated with them.

Emergency preparedness and response will be reviewed by Tullow on at least an annual basis and after the occurrence of any accident or emergency situations to ensure that lessons learnt inform continuous improvement. Emergency exercises will be undertaken on a regular basis to confirm

adequacy of response strategies. Investigations of accidents or incidents will follow formal documented procedures.

9.4.7 *Management of Change*

Changes in the project may occur due to unanticipated situations. Adaptive changes may also occur during the course of final design, commissioning or even operations. The project will implement a formal procedure to manage changes in the project that will apply to all project activities.

The objective of the procedure is to ensure that the impact of changes on the health and safety of personnel, the environment, plant and equipment are identified and assessed prior to changes being implemented.

The management of change procedure will ensure that:

- proposed changes have a sound technical, safety, environmental, and commercial justification;
- changes are reviewed by competent personnel and the impact of changes is reflected in documentation, including operating procedures and drawings;
- hazards resulting from changes that alter the conditions assessed in the EIA have been identified and assessed and the impact(s) of changes do not adversely affect the management of health, safety or the environment;
- changes are communicated to personnel who are provided with the necessary skills, via training, to effectively implement changes; and
- the appropriate Tullow employee accepts responsibility for the change.

As information regarding the uncertainties becomes available, the project EMP will be updated to include that information in subsequent revisions. Environmental and social, as well as engineering feasibility and cost, considerations have been and will continue to be taken into account when choosing between possible alternatives. A management of change procedure is integrated in the project EHSMS.

9.5 *CHECKING AND CORRECTIVE ACTION*

9.5.1 *Introduction*

Checking includes inspections, monitoring and audits to confirm proper implementation of EHS systems as well as effectiveness of mitigations. Corrective actions include response to out-of-control situations, non-compliances, and non-conformances. Actions also include those intended to improve performance.

9.5.2 *Inspection*

EHS inspections will be conducted by subcontractors on a daily basis. The results of the inspection and monitoring activities will be reported to Tullow on a weekly basis or more frequently if requested by the EHS Manager or the technical Managers responsible for operational activity. Examples include daily operations and drilling reports which will feedback on any incidents and the status of pro-active EHS work and activities.

9.5.3 *Monitoring*

Monitoring will be conducted to ensure compliance with regulatory requirements as well as to evaluate the effectiveness of operational controls and other measures intended to mitigate potential impacts.

With respect to the impacts identified in the EIA, Tullow has developed a programme to monitor the effectiveness of the mitigation measures (*Chapter 7*). The programme describes what effect is to be measured and the frequency.

In conjunction with monitoring of the effectiveness of specific mitigation measures, Tullow has developed a programme to monitor for compliance with relevant regulatory standards. This programme also ensures that subcontractors are meeting contractual obligations with respect to work practices and design specifications. Monitoring is carried out by the Tullow EHS department and/or by subcontractors under contractual obligations. The parameters to be measured along with the frequency of monitoring are provided in *Chapter 7*.

9.5.4 *Auditing*

Beyond the routine inspection and monitoring activities conducted, audits will be carried out internally by both Tullow and its partners in the Jubilee JV (including the Government of Ghana) to ensure compliance with regulatory requirements as well as their own EHS standards and policies. Audits to be conducted will also cover the subcontractor self-reported monitoring and inspection activities. The audit shall be performed by qualified staff and the results shall be communicated to the Jubilee JV Asset managers and related executive management.

The audit will include a review of compliance with the requirements of the EIA and of this EMP and include, at minimum, the following:

- completeness of EHS documentation, including planning documents and inspection records;
- conformance with monitoring requirements;
- efficacy of activities to address any non-conformance with monitoring requirements; and
- training activities and record keeping.

There will be a cycle of audits into specific areas of the project such as waste management, and effectiveness of local content plans and discharge controls. The frequency of audits will be risk based and will vary with the stage of the project (more frequent in the early stages of the project) and will depend on the results of previous audits.

9.5.5 *Corrective Action*

Identifying potential impacts, hazards and risks is an important part of the EHSMS approach. Equally important is the investigation of 'near miss' or accidents/incidents so that valuable lessons and information can be learnt and used to prevent similar or more serious occurrences in the future.

Tullow will implement a formal non-compliance and corrective action tracking procedure for investigating cause and identifying corrective actions in response to accidents or environmental or social non-compliances. This will ensure coordinated action between Tullow and its partners in the Jubilee JV, and also all subcontractors. The Tullow EHS Manager will be responsible for keeping records of corrective actions and for overseeing the modification of environmental or social protection procedures and/or training programs to avoid repetition of non-conformances and non-compliances.

9.5.6 *Reporting*

Throughout the project, Tullow will keep regulatory authorities informed of the project performance with respect to EHS matters by way of written status reports and face-to-face meetings. Tullow will prepare a monthly report on environmental performance and submit it to Ghana EPA. Copies may be made available to other interested authorities upon agreement with Ghana EPA. For CSR activities, Tullow will submit quarterly reports to the six District Assemblies and the Regional Co-ordinating Council in Takoradi.

Tullow shall release corporate annual reports on environmental and social performance which will be available to the public via Tullow's website. The content will be determined with consideration of national requirements and lender requirements.

In addition to regular reporting, official notification shall be made to the government for any of the following:

- significant modifications to the EMP;
- significant design, routing or implementation changes;
- results of environmental monitoring;
- community incidents; and
- safety incidents or accidents.

Tullow will make accessible to government authorities, or provide upon request appropriate documentation of EHS related activities, including

internal inspection records, training records, and reports. External monitoring reports will also be publicly disclosed annually.

Subcontractors are also required to provide EHS performance reporting to Tullow on a regular basis through weekly and monthly reports. This will be used as input to the above.

9.6 *COST ESTIMATES*

Cost estimates for implementing the core environmental and social management plans in 2010 are outlined below. These estimates will be refined as the management plans are developed and implemented as outlined in *Table 9.1*.

- Jubilee Field EMP (including ISO 14001 in 2011) – USD 300,000.
- Environmental Monitoring Plan – 1,300,000.
- Waste Management – USD 240,000.
- Emergency Response Plan – USD 300,000.
- Oil Spill Contingency Plan – USD 750,000.
- Safety Training – USD 400,000.
- CSR Management Framework and Plan – 1,000,000
- Support for upgrading land use and development plans for six municipalities in project area – USD 1,300,000
- Public Consultation and Disclosure Plan – USD 400, 000
- Voluntary Principles on Security and Human Rights Training – USD 150,000

It should be noted that standard design or operating practices required for the project, such as oily water treatment on the FPSO or preventative maintenance, are not included in the above budget estimates.

9.7 *COMMUNITY DEVELOPMENT AND CORPORATE SOCIAL RESPONSIBILITY*

The Jubilee Joint venture has developed a CSR framework, comprising the following components;

- Vision, Values, Strategy.
- Strategic Focus Areas.
- Planning.
- Implementation.
- Communication and Consultation.
- Monitoring and Evaluation.

Key elements of the CSR framework are outlined below.

9.7.1 *Vision, Values and Strategy*

The Jubilee Partners vision is for the development of the oil and gas business in Ghana in a way that is both profitable and delivers sustainable growth in the long term. Its vision is to be the leading exploration and production partnership in Ghana, committed to supporting the socio-economic development of Ghana for the life of the project.

Its CSR values are as follows.

- To respect the people of Ghana and its socio-cultural diversity.
- To contribute to and support local communities.
- To ensure environmental sustainability.
- To value and foster long-term relationships.
- To be transparent in our activities and reporting.

The core elements of its CSR approach are as follows.

- Adopt a precautionary, long-term sustainable approach.
- Promote an effective community-inclusive approach in planning and execution of our CSR programme and projects.
- Partner effectively with local communities, Traditional Authorities, District Assemblies, NGOs and Development Partners.
- Use internationally recognised practices to manage potential impacts on the environment.
- Invest in people and resource governance.

9.7.2 *Strategic Focus Areas*

The Jubilee CSR programme strategy will focus on four key areas, namely Health, Education, Employment, and Natural Resource Governance. The objectives for each of the areas of focus are highlighted in *Table 9.3*.

9.7.3 *Planning and Implementation*

Planning for CSR programmes and projects delivery will involve the following three distinct stages.

- Project Identification.
- Preparation and design.
- Appraisal and selection.

Each stage will follow a transparent and open process designed to deliver best socio-economic value to stakeholder communities. CSR programme implementation will address planning, budget preparation, project execution, monitoring and evaluation.

Table 9.3 Objectives for CSR Areas of Focus

Objective	Potential areas for action
<p>Health Promote and foster wellbeing of the impacted communities.</p>	<ul style="list-style-type: none"> • Endemic and communicable disease prevention • Primary Health Care education • Capacity building for service delivery • Training of health workers
<p>Education Improve the educational standards in the Region.</p>	<ul style="list-style-type: none"> • Entrepreneurial and skills training • Physical infrastructure provision • Teacher training programmes • Teaching and learning materials • Establishment of a education fund
<p>Employment Encourage diverse programs and initiatives that will create jobs, skills and enterprises</p>	<ul style="list-style-type: none"> • Promotion of livelihood projects • Ecotourism promotion • Service industry. revitalisation • Diversification of economic base • Incentives for private sector investments • Value additions to the fishing and farming
<p>Natural Resource Governance Maintain efficient resource governance to ensure sustainability of the limited resources at the community level</p>	<ul style="list-style-type: none"> • Management of scarce natural resources • Development of guide lines for resource utilisation • Capacity building for governance leadership • Prevention of pollution and Threatened species

9.7.4 Consultation and Communication

Effective CSR programmes/projects will need to take account of the socio-cultural, administrative and indigenous governance systems in the affected communities. Historically, local communities have managed their land and resources through their chieftaincies. The project will establish Social Responsibility Committees (SRCs), based on proven indigenous systems and international capacity building models, as a representative forum of project stakeholders.

The SRCs will have dual functions to:

- provide a channel through which stakeholders can voice grievances, settle disputes, and reconcile conflicting interests regarding the project (see Section 9.8 below); and
- serve as a platform for negotiating how benefits and opportunities arising from the project are allocated among stakeholder communities.

9.7.5

Stakeholder Identification and Selection

The first step towards establishing the SRC will be to define the parties that have an interest in, or may be affected by, the project, ie parties regarded as project stakeholders.

Stakeholders will comprise three broad categories.

- Stakeholders situated within Sekondi-Takoradi. This group's interest in the project arises from having much of the onshore-based project support located in the Sekondi-Takoradi area; consequently, this area stands to benefit from the economic impacts of the project.
- Stakeholders from the 115 coastal villages and communities in the six districts within the project area. This group's interest in the project arises because these communities are closest to the site of project activities; they may consider that they should receive most benefits and may be most at risk from project impacts.
- Stakeholders in the (formal and informal) fishing industry. This group has been defined separately since it includes commercial fishing operations that may not be based in Effasu or Sekondi-Takoradi. The Department of Fisheries is included in this category. The group's interest in the project stems from the perception that project activities may interfere with fishing activities, and vice versa.

Stakeholders in each of these groups will be further subdivided in terms of the sectors, institutions, or interests they represent, such as Local Government institutions and officials, Regional Government representatives, Traditional Leadership, local business associations, Non Governmental Organisations (NGOs), Community Based Organisations (CBOs), and other interest groups within communities.

9.7.6

Monitoring and Evaluation

Monitoring and evaluation of the CSR programme and project delivery will be a continuous activity which allows Jubilee Partners to identify possible changes required in subsequent stages in the CSR programme implementation process. This will allow Tullow to correct any deviations that may have arisen between what was intended and what has actually been delivered by a specific project, and it will be part of the learning process in engaging Ghana in delivering our CSR programmes.

The monitoring and evaluation process will allow the project to assess the effectiveness of CSR activities and their economic, social, health and environmental impacts in the target population.

Grievances may be verbal or written and are usually either specific claims for damages/injury or complaints or suggestions about the way that the project is being implemented. When a grievance has been brought to the attention of the project team it will be logged and evaluated. It will not be possible, or in some cases desirable, to address all grievances to the satisfaction of the stakeholders, however, in each case the decision made and the reason for the decision will be communicated to the relevant stakeholders and recorded.

Box 9.2 outlines the main components of the grievance procedure.

Box 9.2**Summary of the Grievance Procedure****Receipt of Complaints**

Complaints received verbally or in writing will be recorded by the Community Liaison Officer who will inform the CSR Community Relations Coordinator based in Takoradi. The CSR Community Relations Officer is responsible for ensuring that appropriate actions are taken in response to any complaints. CSR Community Relations Coordinator will then submit a report to the Project Implementation and Oversight Committee which will be made up of representatives of key stake holders.

Grievance Register

The Grievance Register will contain a record of each complaint, the actions taken and the persons responsible for specific action. Key dates to be logged include:

- date the complaint was reported;
- date information on proposed corrective action sent to complainant (if appropriate);
- the date the complaint was closed out;
- date response was sent to complainant.

Tracking the number of grievances and their nature also allows the project team to evaluate how the project is affecting the communities and how to amend or explain activities that are causing most complaints or claims. Tracking by date identifies grievances that are not being addressed in a timely manner. Tracking by responsible party allows the project team to follow up on progress on specific issues.

Grievances/complaints will be logged separately from compensation claims.

Project Response

Response to complaints must be in writing, though a verbal response will also be provided where appropriate under the circumstances (e.g. to restore the relationship or where the complainant cannot read). Complaints will be responded to, though not necessarily resolved, within a reasonable period (e.g. one week) of being received. This may be a summary of what is planned and when it is likely to be implemented. Further correspondence should be given once the complaint is closed.

Monitoring Complaints

The project team will:

- provide a weekly report to management detailing the number and status of complaints and any outstanding issues to be addressed; and
- provide monthly reports, including analysis of the type of complaints, levels of complaints, and actions to reduce complaints.

Figure 9.2 EMP Implementation Organisation

