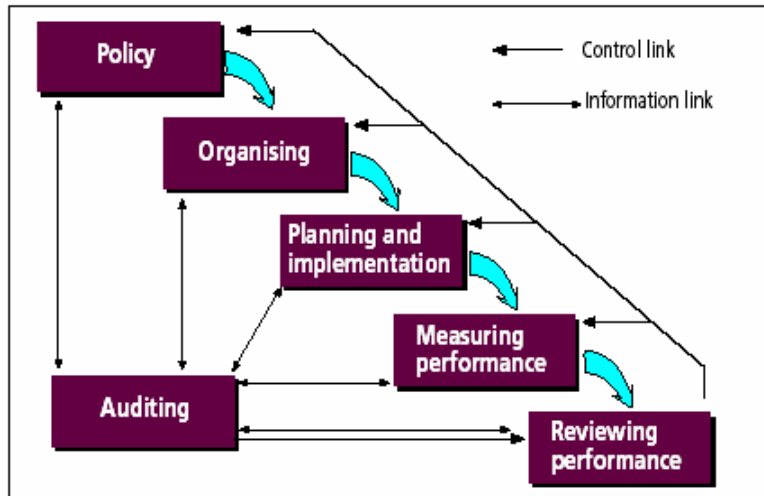


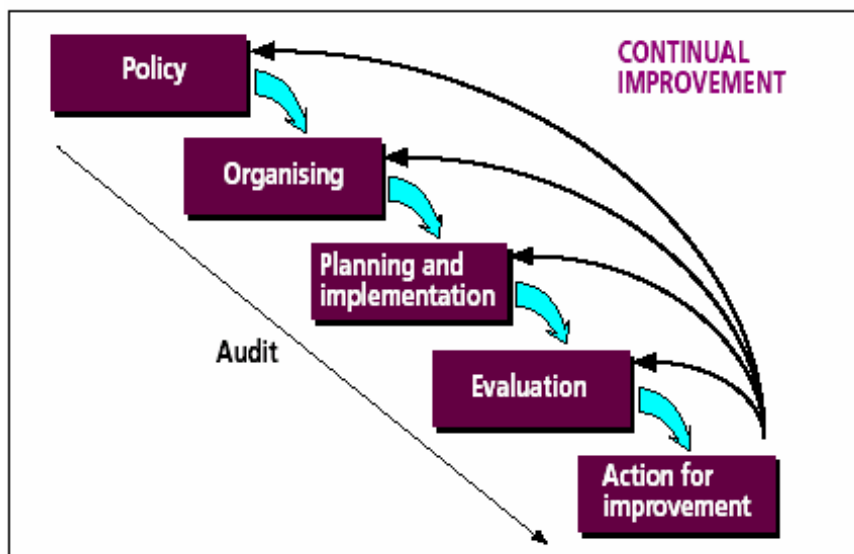
Matthew Brown
Health, Safety & Environment Consultant.
98 West Avenue - Clacton on Sea - Essex - CO15 1HB
Telephone 01255 435873.



HSG 65

HEALTH, SAFETY & ENVIRONMENTAL MANAGEMENT SYSTEM GUIDELINES

HSEMS



OHSAS 18001

1. HSE MANAGEMENT

1.1 The Management Framework

HSE management is structured through a multi-tiered system of documented statements.

In hierarchical sequence these are: - .

- **Statement of Commitment:** **WHAT** the company believes in and is committed to; the philosophical cornerstone for the management of health, safety and environment. .

- **Aspiration:** **WHAT LEVEL** of HSE performance the company wants to achieve. .

- **HSE Policy:** **HOW** the company wants to pursue the HSE Aspiration and Statement of Commitment (i.e., the adopted course and principles of action).

Strategic HSE Objectives: The key issues for the full implementation of the corporate HSE Policy and achievement of the company's Aspiration, including information as to **WHEN** and **WHERE** the company wants to achieve these.

-**HSE Codes of Practices:** The detailed standards within "the Companies HSE management framework that facilitate systematic and full" compliance with the corporate HSE Policy and achievement of the corporate Strategic HSE Objectives.

- **HSE Procedures:** The process to be adopted by the Company in executing their activities in order to meet all of the above.

-**HSE Plans and Targets:** The issues in the long term Strategic HSE Objectives; but in greater detail and phased into shorter time frames, e.g. from multiple years to annually (or shorter) identifying **WHO** is responsible for achieving these.



Figure 1: Purpose of HSEMS Requirements & Expectations

It is, specifically, for this purpose that the company defined HSEMS Requirements and Expectations, articulating the standards that shall be followed within the company in developing and operating HSEMS

Provided that they meet these Requirements and Expectations, departments are permitted to develop their own HSEMS which best suits their needs. The company intends to be self-regulatory in all HSE aspects. This requires that as part of its corporate governance role, it assures and verifies that elements within the company have and implement an HSEMS and comply with relevant laws and regulations or in their absence, with internationally recognized standards. This verification will be done via periodic audits, which are a key component of the corporate assurance process.

1.2 **Commitment to HSE**

The following explicit Statement of Commitment is now forms the basis of all activities -

The company is committed to:

pursue the goal of no harm to people, which includes the local communities

Protect the environment.

use energy resources and materials efficiently to provide products and services

manage HSE matters with the diligence accorded to any of its other critical- business activities

play a leading role in promoting best practice in our industries

promote a culture in which all employees share this commitment

transparency in the public reporting of HSE performance

In this way we aim to have an HSE performance we can be proud of, be a good neighbour, contribute to sustainable development and, earn the confidence of customers, employees and the society at large.

The company has not had a Statement of Aspiration previously and now makes it as follows:

The company aspires to achieve an HSE performance that is exemplary and which is equal to, or better than that required by legislation..

1.4 HSE Policy -

This set of policy statements, concerning Health, Safety and Environmental activities is applicable to the whole company. In addition, a number of separate policies provided focus and detail for certain key aspects of this integrated HSE policy.

THE COMPANY shall:

have a systematic approach 'to HSE Management designed to ensure-compliance with local "laws and regulations" or in' their absence, by internationally recognised standards.

conduct activities in a manner designed to minimise HSE risks to a level which is -AS Low As Reasonably Practicable (ALARP).

set targets for continuous HSE performance improvements

measure, appraise and report performance.

hold appropriately empowered line management staff accountable for HSE performance

include HSE competencies and performance in the appraisal of all staff and rewards accordingly

empower all its employees to refrain from actions that are considered a threat to HSE

require contractors to manage HSE in line with this policy

The company will, through a documented Health, Safety and- Environment Management System (HSEMS), implement this policy and conduct periodic audits to verify compliance.

1.5 Strategic HSE Objectives

These are as follows:

Health:

No harm to-people, whether they be employees, contractors or third parties

Safety:

No harm to people, whether they be employees contractors or third parties

Resources:

Optimise use of resources - land, energy and raw materials

Discharges to water, air or land

Minimise and control all wastes produced by the company operations.

Objectives can only be meaningful if they are SMART i.e. Specific, Measurable, Achievable, Realistic and Time-based.

As such, and notwithstanding the invariably -long term nature of these objectives (e.g. 5 - 10 years or longer), where possible they should contain information as to WHEN and WHERE the company to achieve these.

1.6 HSE Codes of Practice .

Codes of Practices articulate broad common guidelines and detailed standards on the entire range of HSE issues in the company. Essentially, the Codes of Practices document how the company wants to manage HSE and the criteria against which the company will be audited.

In adopting or setting HSE standards the company will adopt internationally recognised standards -where local laws and regulations do not exist.

1.7 HSE Procedures.

Development of detailed HSE Procedures is the responsibility of the company managers, who should follow the guidelines and standards documented in the HSEMS Requirements and Expectations and Codes of Practice.

1.8 Company HSE. Plans and Targets

In consultation with their respective Directors, and with the external agencies if required, managers shall formulate their own HSE Plans and Targets. These shall cover the range of company Strategic HSE Objectives, as relevant to the particular area of operation.

The plans shall detail how the Group Companies intend to meet these objectives, broken down into meaningful and: SMART targets, with distinctive milestones. In addition to setting specific time frames, the SMART targets shall specify WHO is responsible for achieving these. Where areas Companies already meet some or all of the objectives, the plans should demonstrate how the effort will be sustained.

1.9 Requirements and. Expectations.

A statement of Basic Requirements for each of the HSEMS Elements that articulate the broad standards to be followed by the company in developing and operating the HSE Management System

A number of Expectations for each of the HSEMS sub-elements that articulate the minimum requirements for a number of critical HSE issues and topics here, also, the company expects all areas to comply with these and to produce either a document or a system for each of the Requirements or group of Expectations for the reasons mentioned above. The areas are free to expand on the Expectations where this is considered to be of benefit.

2. THE HSE MANAGEMENT SYSTEM

2.1 Introduction

The HSE Policy requires that Company area implements systematic HSE management that ensures compliance with the law and achieves continuous performance improvement. The company recommends an integrated HSE Management System, as opposed to separate systems for each of the three elements, Health, Safety and Environment.

In general terms, the management system should concentrate on critical issues and activities, ensuring that these are properly controlled (i.e., that measurements are made, performance is reported and monitored and areas for improvement are identified). The management system should provide a structured process for achieving continuous improvement, the rate of which is generally set by the company itself, taking into account legal and other company requirements.

The HSE management system facilitates the management of HSE hazards (and their effects) associated with the business of the organisation. This includes the organisational structure, planning activities, responsibilities, standards, documentation and resources -for developing, implementing, achieving, reviewing and maintaining the organisation's HSE - : Policy and meeting it's stated 'objectives.

An HSEMS will bring improvement in HSE performance in the long term, provided the company is 'working and improving the system'. This requires time for behavioural and attitudinal change to support compliance with the system.

This Guideline describes the elements and sub-elements of the HSE Management System and the broad and minimum requirements for each of these.

2.2 Objectives.

The key objectives of this HSEMS Guide are to:

Provide a concise and comprehensive guide on all aspects of an HSEMS.

Provide an HSEMS framework which incorporates the requirements of external certification systems, e.g., ISO 14001, and other existing/future standards e.g., BS8800 and OSHAS 18001.

Include those components of Sustainable Development which are typically addressed within an HSEMS, such as consultation, environmental and social impact assessments, etc.

Provide a framework against which the company can assess their own performance in HSEMS implementation.

H.S.E.M.S. STRUCTURE



2.3 Basis of HSEMS

Over the last few years there have been numerous standards issued dealing with health, safety and the environment. While dealing with differing topics they all shared many common features. Therefore this guidance based on ISO 14001 for the environment such as OHSAS18001 and BS8800 for Occupational Health and Safety. Users will notice similarities with other standards dealing quality such as ISO 9000 – the main reason is that all the standards have broadly common aims and objectives.

2.4 Scope and structure

This Guideline describes both the HSEMS Requirements and how these may be met.-The document is not written as a specification. However, by describing what is expected to be in place, it provides guidance on Companies may develop their own HSEMS, how they may audit themselves and how external auditors will audit the organisation.

For practical purposes, the eight HSEMS elements have been divided into 30 sub-elements that cover the entire HSEMS. This structure and sub-division largely follow that used in the standards referred to above.

For each sub element the following is provided:

Basic Requirements: setting out the summarised requirements for each HSEMS element.

Expectations: specifying the key issues that must be in place to satisfy the, basic Requirements or, in other words, to fully implement the particular HSEMS sub-element.

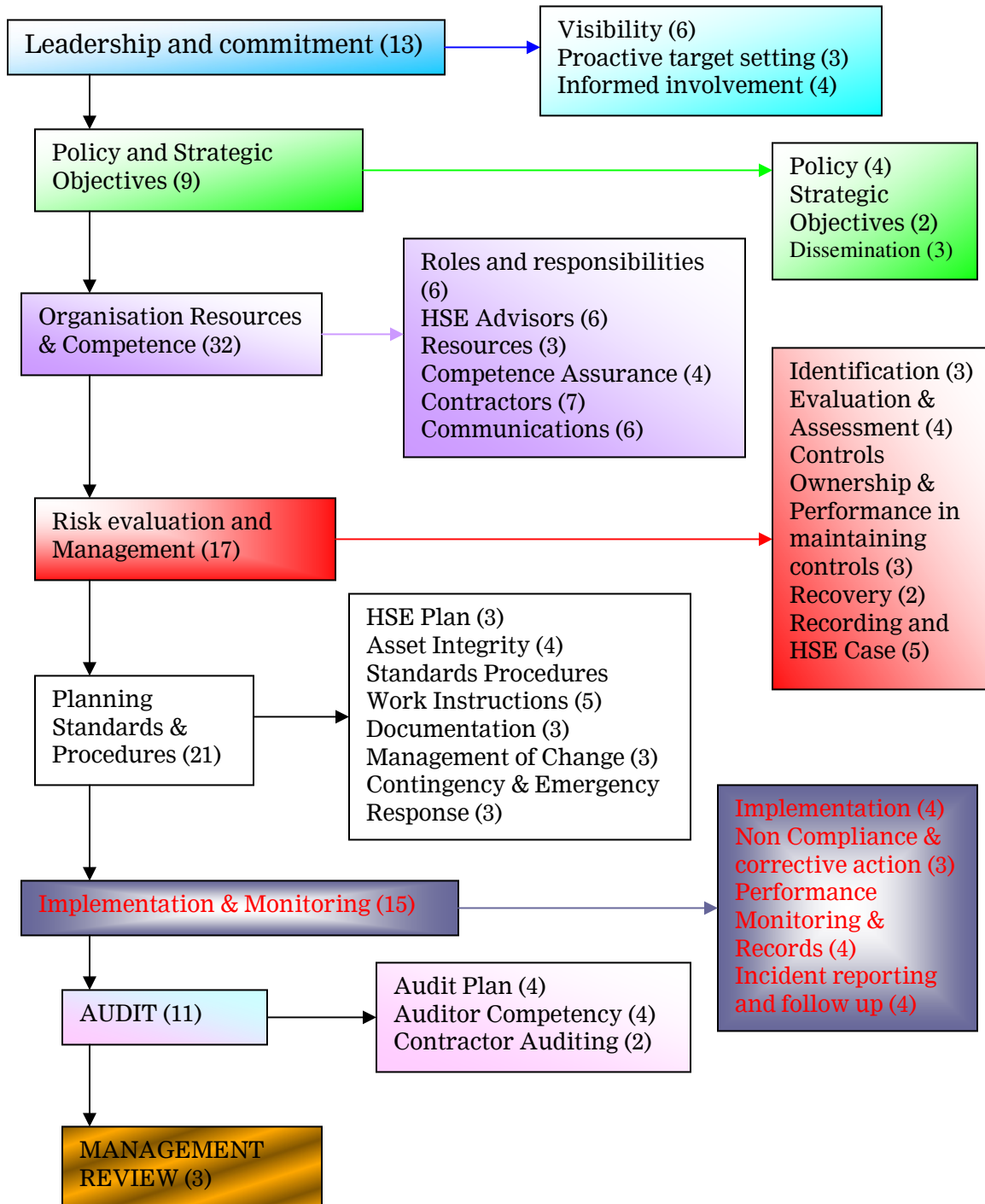
Typical supporting documents, procedures and guidelines: the types of procedures or other documentation typically expected to be found in an organization to support the implementation of particular sub-element.

Good examples of such procedures and documentation should either be found in documented format at each operating location.

The following diagram outlines the basic HSEMS broken down into sub elements.

**HSEMS ELEMENTS
(NUMBER OF
EXPECTATIONS)**

**SUB ELEMENTS
(NUMBER OF EXPECTATIONS)**



2.5 Terminology

When reference is made for actions to be taken, the intent of the following words are:

Shall, Will, Must means that an action is compulsory

Should, Would, If Possible - means that an action is not compulsory but is recommended

May means that an action is optional and no recommendation is made as to whether or not it is to be carried out.

2.6 Fit for Purpose.

In any business, the changing face of the business, including the increasing use of contractors for non-core business requires more, rather than less, formalisation of the business processes.

While increasing the number of interfaces, any system must be such that personnel understand the hazards and effects and their roles in the management of HSE.

A measure of the success of the system is whether the company and contractors' personnel understand their roles and the risks involved. The level of detail and complexity of the HSEMS, the extent of documentation and the resources devoted to -it should be commensurate with the size of the organisation and the nature of its activities.

The HSEMS must meet the needs of, and be understood by those responsible for managing the risks.

2.7 Continuous -improvement

Evaluation of the incentives to improve HSE shall be an on-going process and can include, for example:

- reduced accidents, emissions, effluents and waste -lower cost
- improved reliability
- reduced potential liability
- improved reputation with regulators, the public and customers
- enhancement of employee pride

It may be possible, in some cases, to quantify an economic incentive for these improvements by comparing the "Price Of Non-Conformance" (PONC) with the "Price Of Conformance" (POC).

Some typical examples of PONC include:

- the costs of cleaning up spills.
- repairing the damage caused by accidents
- carrying-out incident investigations.
- dealing with greater regulatory or public scrutiny, which result from poor performance record
- insurance, payouts and increases in premiums

Typically included in the POC is additional cost, such as that for additional control equipment, staff or training.

If PONC is greater than POC, an economic incentive may exist for implementing the improvement measures.

2.8 External Certification Status

Whether to pursue external certification status is a decision to be made by the Companies themselves. It may be compulsory for some companies in order to

conduct their business in other parts of the world e.g. ISO14001 certification is an International Safety Management (ISM) requirement for the companies operations. -Also, external certification may be preferred by some Companies with a view to the worldwide approach--to HSE Management of their International Shareholders/ Customers.

Other than for the above external reasons, it may be too early for Companies to pursue external certification status as the primary goal.

HSEMS development is an ongoing process and typically time is required to allow full assessment of the benefits of the various external certification routes as the systems are developed and introduced.

Notwithstanding this, it is recommended that Companies develop their HSEMS in a manner that is compatible with the structure and methodology of existing external standards and certification systems. Amongst the many benefits are e.g. standardised methods for future external audits by consultants, common reporting mechanisms across the company, and benchmarking methods with international peers and competitors.

Furthermore, early compatibility will reduce later effort in case that external certification should become desirable or compulsory.

It is for these reasons that the structure and details contained in this Guideline are closely aligned with ISO, and OSHAS standards for HSE management systems.

2.9 HSE-critical Activities

HSE-critical activities' are mentioned in most of the HSEMS Elements and Sub-elements and are defined as follows:

HSE-critical activities are those activities which when performed satisfactorily contribute to the control of hazards. An HSE-critical Activity is an activity with an objective which contains some element of the four steps of the hazard and effects management process i.e. identify, evaluate (assess), manage (control), and review (verify).

HSE-critical activities should not be interpreted as being applicable to the worksite only i.e. operating equipment and plant. HSE-critical activities can be at all levels within the company with activities and objectives that are applicable to that level e.g.:

Senior management is responsible for establishing and maintaining HSE policy, strategy and objectives, external relations and revising the HSEMS. People who work at the “technical support” level are responsible for setting procedures -

People who work at the “supervisory” or “activity management” level are responsible for planning, execution and monitoring (review and verification).

People who work at the “task execution” are responsible for the direct management of control and recovery measures.

All the above activities are HSE-critical.

3. ROLES & RESPONSIBILITIES

In HSEMS development and implementation, distinction is made between the governance role of the corporate organisation and the operating role of the company

3.1 Directors and Divisions

In their corporate governance role:

The Directors will maintain an overview of the progress made by their respective Group Companies to implement their HSEMS and achieve the Expectations. If and when required, the Directors should steer the Group Companies on key issues that may affect achievement of strategic HSE objectives, e.g., non-compliance with the corporate HSE policy, gaps in meeting HSEMS Expectations.

The Board has the following responsibilities:

1. It is the custodian of the HSEMS. It will periodically review the HSEMS and the Expectations for completeness and/or requirements for change.
2. They will provide assistance to the divisions/ areas where clarification is required on structure, interpretation of Expectations, etc.
3. It will collect information on HSEMS implementation progress from the divisions /areas via routine methods (e.g. Annual HSE Letter) or ad-hoc as/when required. It will alert respective Directors as/when required on key gaps in specific divisions/areas and will provide routine progress report to the Directors and the Chief Executive Officer, e.g., Annual HSE Report.
4. It will perform or arrange to have carried out a programme of assurance activities, e.g., inspections, assessments and audits to verify that the company comply with the corporate regulations and rules and achieve the Expectations. The findings of these assurance activities will be provided to the respective General Managers and Department Managers as appropriate.

3.2 Company Structures

In hierarchical sequence, the roles and responsibilities in the company for HSEMS implementation are as follows:

General Managers are responsible for the Company adoption of an HSEMS which is “fit for purpose” and which, as a minimum, meets the Requirements and Expectations. This could include specific Requirements and Expectations additional to those specified by legal and business needs. They should provide appropriate resources to develop the HSEMS and the procedures for its implementation.

Senior Line Managers are responsible for implementing the HSEMS in their respective organizations/ areas/ departments and/or facilities. They have a shared responsibility for achieving the specific Requirements of the Company HSEMS.

They should deploy appropriate resources and train their staff to understand the HSEMS and act in accordance with its Requirements and Expectations.

Managers are responsible for developing the “fit for purpose” HSEMS. The staff should provide support and advice to the Line functions in implementing the HSEMS e.g. assistance in training of line staff, developing implementation plans, progress monitoring and carrying-out self-assessments and audits. .

Amongst others, Managers will:

Maintain and enhance the HSEMS in accordance with emerging advice on new Requirements and/or. Expectations.

Perform audits of the line organisations to assure Company senior management that the operations are in compliance with the HSEMS Requirements and Expectations.

Together with appropriate departments; maintain a “Library” to facilitate sharing of HSEMS "Best Practices" and "Lessons Learned", e.g. systems, programs and procedures used to meet the HSEMS Expectations. The transfer of HSE technology - is an essential component of the continuous improvement process.

Establish a document control system for communicating- and distributing the HSEMS and associated HSE systems, programs and procedures. As a minimum, such a system should include procedures for issuing information to line channels, acknowledging receipt of documents, cancellation of redundant documentations and its physical removal. By preference all documents should be clearly identified with elements such as issue number, issue date and issuing authority being clearly shown.

4. HSEMS REQUIREMENTS AND EXPECTATIONS

Element 1. Leadership and Commitment

This HSEMS element addresses the top-down commitment and company culture necessary for success in the systematic management of HSE.

Management and supervision (at all levels) shall be regarded as being fully committed to HSE by all staff and contractors. They are to be seen as providing a leading role towards constant improvement through leadership action and planning.'

Basic Requirements -

This HSEMS element has been sub-divided into three sub elements with Expectations as follows:

1.1 Visibility.

Expectations "

This sub-element contains six Expectations. -

1. Management shall provide strong and visible leadership to promote “a culture” in which all employees share a commitment to HSE. Top/senior management shall set a personal example in day-to-day work by: putting HSE matters high on the agenda of meetings, from the Board downwards communicating the importance of HSE considerations in business decisions and in communication with stakeholders. Immediate and visible response and involvement in case of incidents or other abnormal events related to HSE. Seeking internal and external views on HSE: Recognising achievement.
2. Management shall demonstrate commitment to implementing the HSEMS by that the necessary resources (i.e. manpower and finance) are provided with relevant milestones and reviews identified within the Business Plan.
3. Management shall communicate HSE Policy, Objectives, Requirements and Expectations to employees and contractors. .
4. Management shall discuss and review with employees and contractors the, progress made against specific “results” and “activity” HSE targets.
5. Management shall demonstrate active personal participation in HSE activities, such as training, reward and recognition schemes, industry/contractor workshops, conferences and audits.
6. Management shall evaluate all HSE aspects of business decisions before final decisions are reached; the decisions shall be consistent. with. the HSE policy: and objectives conflicts between HSE and cash flow shall be effectively balanced.

Typical supporting documentation, records and guidelines - See 1.3

1.2 Proactive in target setting Expectations

This sub-element contains three Expectations.

1. Management shall ensure that the results of periodic comprehensive management HSE reviews are incorporated in plans, objectives and targets.
2. Management shall jointly develop and discuss with their employees and contractors the HSE `result' and `activity' improvement targets and indicators.

They shall

- verify that performance appraisals of staff and contractors include appropriate HSE results and activity improvement targets.
 - participate in the review of all HSE `result' and `activity' indicators.
3. Management shall ensure that opportunities for participating in the development of new legal requirements are identified and utilised, where appropriate.

Typical supporting documentation, records and guidelines See '1.3

1.3 Informed involvement

Expectations

This sub-element contains four Expectations.

1. Management shall be fully aware of the main HSE hazards associated with their activities and the systems, procedures and field practices in place to manage these hazards.
2. Management shall be fully aware of the high priority areas for improvement as identified in the HSEMS, particularly in relation to legal compliance, Requirements & Expectations, stakeholder issues and the status of the follow up actions.
3. Management shall provide an effective structure and sufficient resources to ensure that employees and contractors are suitably informed on HSE hazards and required compliance levels with internal and external performance standards.
4. Management shall be personally involved in the improvement efforts arising from the formal senior management `Review' of the HSEMS (see Element 8).

Typical supporting documentation, records and guidelines

Documents and Records

- Minutes from management meetings.
- Feedback from site visits & inspections.
- Endorsement of HSE Cases and Plans by senior management.
- Minutes of meetings with contractors.
- Reports on incident investigations.
- Reference to HSE topics in company meetings and in company publications.
- Awards & recognition events for HSE performance.
- Speeches / papers / publications on HSE related topics by company personnel in public domain.
- Minutes of formal HSE MS Management Reviews.
- HSE Tasks and Targets in staff appraisals.

Element 2. Policy and Strategic Objectives

This HSEMS element addresses intentions, principles of action and aspirations with respect to health, safety and environment and the aim of improved HSE performance.

Basic Requirements

Companies shall have a written HSE policy embodying, as a minimum the legal requirements.

HSE objectives shall be: challenging; understood by-all and consistently incorporated in policies. In setting objectives, management shall consider the overall risk levels of their department's activities, and shall identify those critical- operations and installations requiring a fully documented demonstration that risks have been reduced to as low-as reasonably practicable (ALARP).

This HSEMS element has been sub-divided into three sub-elements with Expectations as follows:

- 2.1 Policy Expectations. This sub-element contains four Expectations.
1. Each area shall have an HSE Policy, which shall be consistent with the company HSE Policy and Statement of Commitment and shall be relevant and take account of the current and future nature and scale of activities, products and services of the company
 - take the interests of stakeholders into account
 - be endorsed by the Area Manager, who is the custodian of the HSE policy, and is responsible for its periodic review.
 2. The HSE policy shall be reviewed at least once a year as part of the formal HSEMS review. (see Element 8). This review shall include the results of proactive consultation with stakeholders on the content of the HSE Policy and take into account the continued relevance of its intent, scope and adequacy.
 3. Daughter or subordinate policies shall be available for relevant HSE subjects as pertaining to the particular company e.g. drugs and alcohol, stress, chemical exposure control product safety.
 4. -Contractor policies shall be consistent with the company policies.

Typical supporting documentation, records and guidelines Documents and Records

- HSE Policy
- Daughter Policies e.g. smoking, AIDS, alcohol and drugs, bio-diversity, security.
- Contractors HSE policies

2.2 Strategic Objectives

Expectations

This sub-element contains two Expectations.

1. Each area shall establish and maintain documented strategic HSE

Objectives which shall be:

relevant to the products, and activities and services undertaken by the area.

consistent with the HSE policy and commitments of the company and consistent with the Strategic HSE objectives.

SMART i.e. Specific, Measurable, Achievable, Realistic and Time-based

2. The Company strategic HSE objectives shall provide a framework for setting and reviewing HSE targets in the HSE Plan to ensure continuous improvement. The objectives and targets shall cover:
Safety and health -
Asset integrity issues with an HSE impact
Environment (including waste management)

Typical supporting documentation, records and guidelines.

Documents and Records

- HSE Objectives and HSE Plan.
- Procedure for the identification of objectives and targets
- Procedure for the development of HSE Plans

2.3 Dissemination

This sub-element contains three Expectations.

1. The HSE Policy and daughter policies shall be communicated to all employees and contractors in a language and format that is easily understood. The policies shall be prominently displayed at company work sites and offices.
2. All employees and contractors shall be informed of the relevance of the HSE policies and be aware of their personal role in meeting the requirements of the policies. Records are kept to demonstrate that employees have received and understood this information.
3. All employees and contractors shall be personally informed of revisions to HSE policies.

Typical supporting documentation, records and guidelines

Documents and Records

- Staff induction procedures
- Registers of induction training or personal passport system.
- Contractor management procedures.
- Communication procedures.

Element 3. Organisation, Resources and Competence

This HSEMS element addresses the organisation of people, resources and the competence required for sound HSE performance.

Basic Requirements

The necessary organisation and resources to comply with the HSEMS shall be provided. Responsibilities at all levels shall be clearly described, communicated and understood. Staff shall be developed following structured competency assessment and: training systems. Contractors will be required to Manage HSE in their activities as per or better than the company objectives. HSE communication shall be effective and structured to provide key information to all relevant organisational levels. . .

This HSEMS element has been sub-divided into six sub-elements with Expectations as follows:

3.1 Roles and Responsibilities Expectations

This sub-element contains six Expectations.

1. Direct/indirect roles and responsibilities for all HSE-critical activities shall be defined for relevant employees (company and contractors). The assigned authority levels shall be appropriate for the assigned responsibilities.

The roles and responsibilities for all HSE-critical activities shall be documented in either the HSEMS Manual (see Sub-element 5.4 Documentation - HSEMS Manual) or in a HSE Case(s) (see 4.5 Recording and HSE Cases). These records shall include inputs and outputs necessary for control of the HSE-critical activities and performance standards and mechanisms for verification if the controls work.

2. The assigned HSE roles and responsibilities for HSE-critical activities shall be communicated to the relevant parties and shall be understood and accepted by incumbent employees (company and contractors): They shall be updated and revised in consultation with employees (company and contractor).

Management shall appoint (a) management representative(s) who shall have clearly defined roles, responsibilities, authority and resources for ensuring that HSEMS Requirements and Expectations are established, implemented and maintained in all locations and spheres of operation within the organisation.

The management representative(s):

shall be accountable to senior management;
shall have sufficient knowledge of the company and its activities, and of HSE issues, with Sufficient authority to undertake the role effectively;
shall regularly report on the performance of the HSEMS to top management for review as a basis for improvement and to ensure that HSEMS implementation is achieved in accordance with this Guideline.

4. All employees (company and contractors) shall have quantifiable tasks & targets related to the HSE plan and all staff understand the tasks & targets.

5. Responsibilities for technical integrity of facilities with a potential HSE impact shall be clearly defined, including setting of standards, technical validation of standards and verification of compliance with standards.
6. Responsibilities for maintaining contact with appropriate local HSE authorities shall be defined, established and maintained. This will include a clear description of all operations that are covered by HSE legislation and the penalties for non-compliance.

Typical supporting documentation, records and guidelines Documents and Records'

- Organisation Chart
- Job Descriptions including HSE responsibilities
- Catalogue and specification of HSE-critical activities.

3.2 Resources Expectations

This sub-element contains three Expectations.

1. Top/Senior management shall ensure that sufficient resources (i.e. manpower and funds) are available to ensure the effective operation of the HSEMS and effective management of company and corporate HSE risks.
This shall include resources available for:
 - staffing HSE-critical activities as specified and meeting objectives and plans to improve performance.
 - prompt rectification of HSE-related deficiencies identified by the company, or third parties with a governance or regulating authority.
 - on-going verification that HSE-critical systems function in accordance with the design intent and objectives.
 - ongoing training to maintain and enhance competencies
2. Resourcing levels shall be sufficient to meet the requirements for staffing all HSE critical roles. The resourcing levels shall be periodically reviewed and agreed with line management and supervision that will ensure that account is taken of.
 - actual and forecasted activity levels.
 - actual staff competency/experience levels.
 - existing manning philosophies and policies.
3. Procedures shall ensure that any changes in resource level do not increase HSE risk e.g. leave rotations shall ensure resourcing does not drop to a level that will compromise HSE-critical activities.

Typical supporting documentation, records and guidelines

- Minimum acceptable resourcing levels for HSE-critical (manning philosophy)
- Leave schedules/rotas
- Manual of Permitted Operations (MOPO)

3.3 HSE Advisors. Expectations

This sub-element contains six Expectations.

1. The HSE Manager (or management representative for HSE) shall have direct access to top/senior management.
2. HSE, advisors shall have the relevant regulatory and professional competencies to be able to provide professional HSE advice to the line.
3. HSE advisors can be the custodian of the HSEMS but shall not be responsible for the management of HSE-critical activities: This shall at all times be the responsibility of the line and HSE advisors are responsible for the quality and timeliness of HSE advice to the line.
4. HSE advisors shall monitor and communicate information on HSE issues (national and international, legal requirements,-stakeholder concerns) and best practice from internal and external sources.
5. HSE advisors shall collate HSE performance reports (internal use) and co-ordinate the preparation and verification of the HSE data reporting.
6. HSE advisors shall maintain and conduct a schedule of HSE audits/inspections: and participate in the review of findings from all audits / inspections / incident investigations.

Typical supporting documentation, records and guidelines

- Specification of HSE-critical activities, for which HSE Advisors are responsible
- Job Description of HSE Advisors.
- HSE Inspection/Audit/Review Programme _ .
- Competence Requirements for HSE Advisor roles -
- Minutes of HSEMS Review meetings
- HSEMS Manual and change register
- Audit and Review reports and follow up

3.4 Competence assurance Expectations

This sub-element contains four Expectations.

- 1 All HSE-critical activities (company and contractors) shall have defined and recorded competency levels which shall be 'periodically reviewed and improved where possible.
- 2 All personnel (company and contractor) who perform HSE-critical activities shall be appropriately experienced/qualified and trained to ensure they are competent to undertake these important risk control measures. _
- 3 An HSE competency assurance process shall be in place for all personnel (company and contractor) who perform HSE-critical activities. Competency levels shall be reassessed at intervals which are appropriate with a view to their criticality. Shortfalls shall be documented and addressed in a timely manner.
- 4 There shall be a comprehensive and structured training system which aims to develop competency for all staff (company and contractors) involved in managing HSE-critical activities.

Typical supporting documentation, records and guidelines

Competence Assurance System Records

- Training programmes/schedules
- Competence Standards.
- Competence assurance procedures/manual

3.5 Contractors Expectations

This sub-element contains seven Expectations.

1. For every contract, HSE risk shall be formally assessed prior to invitation to tender.
2. For every contract, a person within the Company shall be identified as being responsible for all activities in the contracting process and the execution of the contract.
3. For every contract, prior to contract award, contractor HSE competence shall be assessed against the HSE risk.
4. Contractor mobilisation shall be conditional upon receipt of an acceptable HSE Plan based on the level of HSE risk and suitable interface arrangements to ensure compliance with the company HSEMS.

All, high-risk: contracts shall have a documented demonstration as to how the risks from hazards and effects are reduced to ALARP. This can be in the form of a HSE Case for major contracts or an HSE Plan.

5. An HSE inspection / audit programme for all contracts shall be in place. monitoring the effective implementation of the HSEMS and interfaces between the contractor and Group Company. . . _
6. Contracts shall specify the following-'
an inspection / audit timetable;
the action to be taken in case of non compliance with standards, terms and conditions;
the reward or penalties for HSE performance;
at least an annual formal review of HSEMS for contracts running for long periods.
7. The company shall be able to demonstrate that the HSEMS of contractors are:
subject to continuous improvement in the course of project execution.

Typical supporting documentation, records and guidelines

Documents and Records

- Register of contractors, pre qualified to carry out company work
- Records of contractor performance on existing and previous -company contracts .
- Contractor HSEMS and plans (including bridging documentation)
- Contractor audit programmes and reports.
- Data base or list of contracts and contract holders.
- Contractor HSE management procedures
- Contractor HSE pre-qualification
- Model Contract HSE specifications
- Assessment of Contract HSE Plans

- Monitoring HSE in contracts

3.6 Communication

Expectations

This sub-element contains six Expectations.

1. The hierarchy of HSE meetings and information flows within the organisation shall be described and documented.
Procedures for internal HSE communication shall be in place and reviewed periodically. - These shall -describe mechanisms for encouraging two way communication on HSE issues within the organisation
Procedures shall be in place for the management of external communications. These shall address HSE issues raised by stakeholders and the registration and processing of public complaints
2. All employees (company and contractor) shall be made aware of their HSE responsibilities during their induction. The induction shall include relevant information on HSE risks and hazards associated with the job and the potential consequences of -
departure from procedures. Records of the HSE induction process should be. maintained.
3. All employees (company and contractor) shall be aware of key HSE information, expectations and process for raising concerns.
4. HSE Committees shall focus on relevant HSE issues and provide a framework for communication on the management of these issues by stimulating effective two-way communication on HSE issues between management and personnel;
engaging all staff in the implementation of HSE management;
serving as HSE advisory bodies to management and promoting suggestions for improvement;
monitoring measures taken for the prevention of accidents, their implementation and adherence;
organising inspections and audits focused on unsafe or environmentally unfriendly practices;
reviewing reports of inspection and audits;
monitoring follow-up of accidents and incidents that have occurred;
endeavour to secure the co-operation of all persons in the promotion of HSE;
advising on HSE training, instructions and guidance of workers.
5. Information on the HSE policy, targets and performance shall be formally reported and available to shareholders and stakeholders, with a mechanism in place to collect feedback.
6. Methods shall be in place to motivate staff to be more aware of HSE controls and to develop a HSE Culture. This can include:
the direct and personal interest shown by a supervisor in his subordinate's work through immediate recognition or criticism
regularly updated HSE performance boards sited in prominent locations;

incentive schemes which should preferably be based on proactive indicators rather than reactive indicators such as e.g. lost time incident (LTI) or total recordable case frequency (TRCF).

Typical supporting documentation, records and guidelines.

Documents and Records .

- HSE Meeting Minutes
- Incentive and suggestion schemes
- Register of public complaints
- Register of suggestions for improvement
- Overview of meeting types, frequency, participants, objectives etc.
- Procedure for internal communication and reporting
- Procedure for managing external communications.

Element 4 Risk Management

This HSEMS element addresses the identification, evaluation and management of HSE hazards and evaluation of HSE risks, for all activities, products and services, and the development of measures to reduce these risks.

Basic Requirements

The risk management process for all HSE-critical operations and installations shall include:

an inventory of the major hazards to the environment and to the health and safety of people from all the activities, materials, products and services.

an assessment of the related risks, implementation of, measures to control these risks and to recover, in case of control failure.

Environmental (impact) assessment (including a consideration of social impacts) shall be conducted prior to all new activities, facility developments and/or significant modifications to existing ones.

Health risk assessment shall address physical, chemical, and biological, ergonomic and psychological health hazards associated with the work.

Soil and groundwater contamination shall be assessed and, where required, control or remediation shall be in-hand.

Product stewardship shall be applied at all stages of product life cycle relevant to the Company's activities.

An HSE assessment shall form an integral part of any proposal for acquisition, divestment, abandonment or merger of business entities.

Note: There are 4 steps in the risk management process: 'identify', 'evaluate', 'manage' and 'review' for which the Risk Management Guideline contains detailed information. For illustrative purposes these four steps are often described sequentially. However, in practice, the stages are not always distinct, and may be combined in procedures and/or structured hazard and risk review techniques, such as HAZOP, QRA etc.

It Must also be recognised that risk management is an iterative process.

This HSEMS element has been sub-divided into five sub-elements with Expectations as follows: --

1 Identification

This sub-element contains three Expectations.

1. There shall be procedures for the systematic identification of the health, safety and environmental hazards, effects and aspects' that may either affect, or arise from, the activities and services of the company:
The identification procedures shall:
provide for structured review using company, industry and international standards;
include a process for updating the hazard, effects and aspect inventories/registers as a result of changes to the operation or findings from e.g. job hazard analyses, inspections or incident analyses;

- be listed in the HSEMS including the employees responsible for using them.
2. Identification of hazards, effects and aspects shall be based on judgement of experienced personnel who use established procedures. The scope of the identification process shall: include those activities under the immediate control of the company or which it can be expected to influence; cover the whole lifetime, of projects (e.g. from inception through to decommissioning and disposal) and consider routine, non-routine and emergency operating conditions.
 3. There shall be a comprehensive and up-to-date inventory or register of HSE hazards, effects and aspects for all units in the company.

Typical supporting documentation, records and guidelines

Documents and Records See 4.3

4.2 Evaluation and Assessment

This sub-element contains four Expectations. -

1. There shall be procedures for the systematic assessment of -HSE -risks and -the significance of the identified 'hazard, effects and aspects' for all operations and assets. The assessment procedures shall . include a process for reviewing and updating the assessments i.e. at specified intervals and/or when circumstances change as part of the change control procedure.
be listed in the HSEMS including the job positions responsible for using them.
2. The assessment and significance evaluation methodology shall take into account legal and regulatory requirements company and unit policies and standards reputation consideration 'of the concerns of stakeholders and in particular the - industry and international Standards lack of available information to determine risk or significance e.g. uncertainty in scientific knowledge financial/ cost benefit considerations of risk reduction measures
3. All hazards, effects and aspects identified in identification process shall be ranked in terms of risk and documented in the inventory or register (Refer to Sub-element 4.1).
The -assessments shall be conducted by qualified and competent personnel and solicit input from personnel directly involved with the risk.
A qualitative. assessment of risk is adequate for most situations for which the concept of the l Risk Matrix shall be used.
In the -comparison of more complex alternatives, or as a regulatory requirement, it may be necessary to undertake a quantitative risk assessment (QRA).
4. A process shall be in place to determine on the basis of risk, those hazards, effects and aspects which are deemed significant, require

controls and the nature of these controls. - E.g. in ISO 14001, a 'significant' environmental aspect is an aspect that has or can have a significant environmental impact and as such must be subject to procedural control.

In determining these controls, in all cases "consideration' shall be given to risk reduction to achieve a level deemed 'As Low As Reasonably Practicable' (ALARP), reflecting cost-benefit considerations.

Typical supporting documentation, records and guidelines
Documents and Records See 4.3

4.3 Controls, Ownership and Maintaining Controls

This sub-element contains three Expectations.

1. During the design stage, HSE risks shall be made ALARP. Emphasis shall be on the prevention of incidents through removal or reduction of hazards and lowering the probability of incidents.
2. In the operations phase, the HSEMS shall provide a demonstrable link between each significant risk and a set of controls or risk reduction measures e.g. through a HSE Case, HSE-critical activity records. The controls shall:
 - be commensurate with the risks and' responsibilities for their implementation shall be clearly defined, understood and assigned to an individual or job position.
 - include documented procedures or work instructions which are developed and maintained using experienced staff, stipulating responsibilities, HSE requirements: (e.g. maintenance, contractor management, suppliers) and acceptable standards for performance. The procedures and work instructions will cover situations where their absence may result in deviations from the HSE policy and the objectives and targets. .
 - be reviewed and updated through inclusion in improvement programmes (HSE Plans, HSE Case remedial action plans).
3. Performance indicators shall be in place for all HSE-critical activities which shall be documented in the specification of the activity together with parties, responsible for each indicator. . -
Performance against each indicator shall be monitored and measured routinely and the results shall be trended and reviewed (see Sub-element 6.3).
Procedures for reviewing employee performance shall include reference to HSE performance indicators. Good employee HSE performance shall be rewarded by staff appraisal systems (see Sub-element 6.1). .

Typical supporting documentation, records and guidelines Documents and Records

- Inventory/Register of HSE Hazards, Effects and Aspects

- Manual of Permitted Operations (MOPO)
- Procedure for the inventory, evaluation and registration of Hazards, Effects and Aspects
- Procedure for the Management of-Change.
- Permit to work
- Hazardous Area Classification Plans
- Operational control procedures and work instructions
- Performance Indicators e.g. audit follow up, training, emergency drills, emissions, plant testing, fire detection, alarms.

4.4 Recovery

This sub-element contains two Expectations.

1. Procedures shall be in place which ensure that appropriate recovery action is taken in the event that an HSE control fails. The procedures shall be recorded in the HSEMS (and HSE Case) and competent persons responsible for maintaining and implementing each procedure shall be defined and clearly understand their responsibilities.
2. Procedures for the recovery from scenarios with high risk and for emergency response shall be in place and subject to regular testing, review and updating in light of actual incidents; analysis of emergency response drills and industry best practice (Refer 5.6 Contingency Planning and Emergency Response). -

Typical supporting documentation, records and guidelines

Documents and Records

- Emergency Response Call Out and Duty Roster (internal)
- Duty numbers for external agencies
- Listing of HSE procedures and parties responsible for the procedures •
Emergency Response Procedures
- Oil spill clean up procedures
- Medical evacuation Procedures

4.5 Recording and HSE Case

This sub-element contains five Expectations.

1. Records of the hazard and effects management process shall be documented and kept up to date, and be accessible and understood by the supervisors responsible for operational decisions. Where there is an HSE Case, the records shall be included in Part 5 (Refer below). The records, either as stand-alone or included in the HSE Case, shall detail: the activities that must be discontinued or restricted in given circumstances i.e. a Manual of permitted operations (MOPO) or a Manual of Simultaneous Operations (SIMOPS).
the recovery action that should be taken in the event that a control fails shall be documented.
2. Systems shall be in place to ensure that all recommendations and actions arising from hazard and aspects analyses and reviews are recorded and closed out. Where there is an HSE Case, these follow-up records may be included in Part 6 (Refer. below). .

3. The company should identify and document those critical operations and installations which require a fully documented demonstration that risks have been reduced to a level as low as reasonably practicable (ALARP).

If practicable, HSE Cases should be developed and available for these operations and installations defined as critical. The HSE Cases: should be endorsed by the Asset or Process Owner and by those managing the asset or operation; should accurately reflect current practice at the location or site and be reviewed per described HSE Case review cycles; should demonstrate that controls in place reduce risks to ALARP; should detail activities that must be discontinued or restricted in given circumstance e.g. when HSE-critical equipment is not available, during adverse weather or when particular non-routine hazardous activities are being carried out. This should be described in for example, a Manual of Permitted Operations (MOPO), Manual of Simultaneous Operations (SIMOPS) or Manual of non Concurrent Operations. '

4. Contractors managing HSE critical activities shall have HSE Cases or equivalent documented risk management demonstration in place.

5. An HSE Case may be described in different ways but typically this is done in a 7 part document as follows:

Part 1: Management Summary and Introduction

A summary of the Case objectives, the main findings and risks, and a brief introduction to the main document.

Part 2 HSEMS for facility or operation.

A description of those elements and sub-elements of the HSE Management System that are directly applicable to the operation or facility.

Part 3 Activities Catalogue

A description of those HSE-critical activities applicable to the operation or facility.

Part 4 Description of operation or asset.

A description of the operation or facility, adequate to provide background information to the hazards and effects analysis, to enable a clear understanding of HSE-critical aspects:

Part 5 Hazard and Effects Register

A demonstration that all hazards and effects have been identified, and the necessary risk evaluation has been carried out and that necessary controls to manage the causes and consequences are in place for the significant risks.

Part 6 Shortfalls -

A summary of any shortfalls identified, with the plan to resolve the findings and thereby improve the operation.

Part 7 Statement of Fitness.

An explanation that the hazards and effects associated with the installation or operation have been evaluated and measures have been taken to reduce the risks to ALARP level.

These seven parts are described in more detail in APPENDIX 3.

Typical supporting documentation, records and guidelines

Documents and Records

- Hazards and Aspects Registers
- Manual of Permitted Operations
- Manual of Simultaneous Operations .
- Change Management

Element 5 Planning, Standards and Procedures

This HSEMS element addresses the planning of work activities, including the risk reduction measures (selected through the evaluation and risk management process). This includes planning for existing operations, managing changes and developing emergency response measures. .

Basic Requirements

Adequate standards and procedures shall be in place and understood at the appropriate organisational levels.

Preparation, review and distribution of all key reference documentation shall be adequately controlled.

Emergency response procedures (including health; -Safety and environmental emergencies) shall be regularly tested.

This HSEMS element has been sub-divided into six sub-elements with Expectations as follows:

5.1 HSE Plan

This sub-element contains three Expectations.

1. Within its Business Planning Cycle, the company shall prepare an annual HSE Plan to meet the company continuous improvement objectives (Refer sub-element 2.3). The plan shall be linked to the Company Business Plan and shall comprise:
challenging but achievable one and five year targets for the actions related to the continuous improvement objectives and action to rectify any deficiencies identified in the HSEMS.
clearly identified all parties accountable and targeted completion dates for the one and five year performance targets.
2. The process for the development of the HSE plan shall include consideration of
resources required/available, responsibilities and the timetable to build and execute the HSE Plan.
coverage of the HSE Plans to include such activities as existing operations; modifications to existing facilities; acquisitions; new developments and projects; abandonment programmes; exploration or development programmes.
present and anticipated future legislative and regulatory requirements; intolerable hazards and effects; technological options; financial, operational and business requirements; views of stakeholders.
3. HSE targets relating to the Company HSE Plan shall be communicated to employees annually (see Sub-element 3.6).

Typical supporting documentation, records and guidelines

Documents and Records

- Business Plans
- HSE Plan
- HSE Objectives and Targets (Part of HSE Plan)
- Procedure for the development of HSE Plans
- Business planning guide.

5.2 Asset Integrity

This sub-element contains four Expectations.

1. The company shall establish and maintain procedures that ensure: - - there is a clearly defined responsibility for asset ownership. - those activities and equipment critical in the safeguarding of asset integrity shall be identified in the HSE Management System, or where available, the HSE Case.
`there is a signed statement of fitness to demonstrate that existing operating ` facilities, new facilities and modifications to existing facilities are designed constructed and commissioned in accordance with company and external standards, codes and regulations.
2. The company shall establish and maintain procedures that ensure: - the documentation necessary (including the HSE Case) to support operation, maintenance and inspection is complete prior to facilities start-up
deviations from the design intent and, for the existing standards and codes require authorisation in accordance with the company's management of change procedure (Refer Sub-element 5.5 - Management of Change)
there is an auditable process of validation by engineers and supervisors of both the original design and subsequent changes
3. The company shall establish and maintain procedures that ensure that the equipment which is critical in the safe guarding of asset integrity during the life cycle shall be subject to controls. The controls shall include:
maintenance
performance testing
a transparent inspection philosophy and program.
a programme of recorded management and cross-discipline and/or cross-facility inspections.
4. The company shall establish and maintain procedures that ensure that the design of new facilities shall be conducted in line with the HSE Risk Management Process (Refer to Element 4 - Evaluation and Risk Management).

Typical supporting documentation, records and guidelines

Documents and Records

- Change Control Register (deviation from original or existing designs)
- Variance Control Register (deviation from codes and standards)
- HSE Cases • Operations Philosophy and/or Maintenance Strategy
- Company design and engineering practices -
- Change Management Procedure (e.g. design, construction, operation, inspection and maintenance)
- Variance Control Procedure

5.3 Standards, Procedures and Work Instructions

This sub-element contains five Expectations.

1. All HSE-critical activities and the supporting tasks shall have written procedures or work instructions in place as necessary. HSE-critical activities for the company shall be listed in the HSEMS.
2. HSE standards and procedures shall be listed in the HSE MS. The appropriate standards and procedures shall be readily accessible to employees, suppliers and contractors and be written in a way that users will understand. Asset managers shall ensure that relevant HSE procedures and requirements for their assets are communicated to suppliers and contractors.
3. A defined process for the development and review of HSE standards, procedures and work instructions shall be in place which includes employee involvement. This process must ensure that HSE objectives are achieved, best practices are incorporated and legislative requirements are met.
4. Company and other suitable Design and Engineering Practices or equivalent standards shall be consistently applied and variances shall be subject to a control procedure:
5. There shall be evidence that in addition to the formal review cycle, modifications to standards, procedures and work instructions are initiated by operations personnel and reviewed in light of incidents.

Typical supporting documentation, records and guidelines

Documents and Records-

- Register of HSE procedures (in-the HSE or HSEMS Manual)
- Procedures and work instructions for Operational Control'
- Documentation management and control system

5.4 Documentation - HSEMS Manual

This sub-element contains three Expectations.

1. A system shall be in place for the management and control of all documents, in paper and/or electronic format; in use to manage HSE. This shall include formal administration, custodianship for technical correctness and communication of correct use. As a minimum the system will cover:
register of laws and regulations as applicable to the. company;
standards i.e. company, and international (if applicable);
procedures for management and execution of HSE critical activities
appropriate supplier and contractor information;
product/material identification and composition data i.e. company and suppliers.
2. There shall be an HSE or HSEMS manual that describes an HSEMS compliant with the guidance contained in this Guideline and other applicable standards. The manual will assist employees and contractors in understanding how the company will meet the HSE Policy and Objectives, by describing or reference to the processes, documents and standards used to manage HSE. The HSEMS may be

described in the manual in different ways but typically this is done in 5-parts as follows: -

Part 1: Management System Elements

A description of the management system elements and sub-elements similar to or as described in this Guideline) -

Part 2: HSE Management System Activities Catalogue

A catalogue of HSE-critical activities and the specification of these activities and their associated tasks.

Part 3: References, Documents, Codes and Standards -

A list of all the documents and standards referred to in Parts 1 and 2. .

Part 4: Shortfall and Remedial Action Plan - A description of shortfalls in the HSEMS and the plan to 'rectify these.

Part 5: HSE Hazards, Effects and Aspects

A register of the significant HSE hazards, effects and aspects

3. The information contained in the HSE or HSEMS Manual shall be accessible to employees and contractors in the most effective format. The manual shall be updated and upgraded in line with requirements for continuous improvement.

Typical supporting documentation, records and guidelines

Documents and Records .

- HSE or HSEMS Manual, Parts 1 - 5
- Documentation and documentation management procedure
- Web management and control procedures

5.5 Management of Change

This sub-element contains three Expectations.

1. The company shall maintain written procedures for the planning and control of all changes, in which the impact of the change shall be assessed to avoid adverse HSE consequences. The change control procedures will cover both permanent and temporary changes to:
people and organisation structure
plant, equipment, processes and their controls - business processes
standards and procedures. .
2. Change control procedures (corporate, /asset, projects) shall document the evaluation and approval process, and the responsibilities and required competencies of those involved. The procedures shall provide for a comparative analysis and documentation of the HSE impact of implementing the change and that of the implemented change.
3. The company shall maintain an auditable Change Control Register in which all changes will be documented. The register shall be kept centrally for the company or specific to operating locations/facility(s) as is deemed most suitable to the company.

Typical supporting documentation, records and guidelines Documents and Records

- Change Control Register .

- Change Management Control procedure
- Security and control of process equipment software

5.6 Contingency Planning and Emergency Response

This sub-element contains three Expectations.

1. A process shall be in place to identify and document credible health, safety and environmental incident scenarios. Appropriate procedures shall be developed and maintained to respond to each of these incident scenarios and for preventing and mitigating the HSE impacts that may be associated with them. (refer to Sub-element 4.4 Recovery).
2. The company shall document and maintain a comprehensive tiered emergency response plan(s) for responding to abnormal situations and potential emergencies. The corporate plan shall be integrated with individual site plans and external agencies as appropriate and shall be compliant with the relevant legislation, company standards and procedures and guidelines. The plan(s) shall include:
 - Organisation and responsibilities, identification of the incident command structure v (command and control personnel).
 - Systems and measures for minimising potential HSE effects e.g. through the mobilisation of support, evacuation procedures.
 - Communications to command and control personnel, emergency services, employees and contractors who may be affected, others likely to be impacted, e.g. local communities.
 - Requirements for training, emergency drills and assessment. .
3. There shall be a process for addressing the management of HSE crises in the company. A crisis in this context is a relatively infrequent event which could escalate into a significant local, national or international event and requires tactical and strategic support from senior management.

Typical supporting documentation, records and guidelines

Documents and Records

- Records of emergency drills and follow up.
- Crisis and Emergency Response directory
- Emergency response documents including interfaces with outside organisations and suppliers of response equipment
- Medical Emergency Guidelines for Management and Health -Care
- Site Emergency Response Plan ,
- Corporate Emergency Response Plan .

Element 6 Implementation and Monitoring.

This HSEMS element addresses the manner -in which activities. are to be performed and monitored, and corrective action to be taken when necessary.

Basic Requirements

HSE performance targets. shall be set to ensure: progression-towards the long-term goals: of no harm to people, and no damage to the environment. Performance indicators shall be established, monitored and results reported in -a way that can be externally verified.

All HSE incidents and near misses with significant actual or potential consequences shall be thoroughly investigated and reported.

This HSEMS element has been sub-divided into four sub-elements with Expectations as follows:

6.1 Implementation

This sub-element contains four Expectations.

1. Activities and tasks shall be conducted according to the standards, procedures and work instructions of the company (see Sub-element 5.3) and company management shall ensure that there are systems in place to verify this.
2. HSE-critical activities with their performance indicators shall be specified in the HSE or HSEMS Manual (see Sub-element 5.4). Each critical activity shall be assigned to an accountable party who shall monitor and regularly report the performance of their activity(s) using the indicators (see Sub-element 6.3).
3. The staff appraisal system will be used to monitor the performance of personnel in:
 - compliance with standards, procedures and work instructions;
 - meeting planned HSE targets (refer sub-element 5.1 HSE Plan);
 - undertaking their HSE-critical activities (see Sub-element 4.3).
4. A documented procedure for the periodic evaluation of compliance with relevant HSE legislation and regulations shall be maintained.
Typical supporting documentation, records and guidelines

Documents and Records

- HSE Plan & Targets
- Company/Departmental/ Asset HSE Performance measurements'/ indicators • Scorecards - HSE component
- Register of public complaints
- Register of HSE Performance Indicators:
Register of HSE-critical activities
- Calibration logs.
- Procedure for HSE Reporting and HSE data collection.
- Procedure for Monitoring
- Procedure Manual for compliance monitoring
- Compliance Monitoring Program
- Complaints handling system

- Staff appraisal system

6.2 Non-compliance and Corrective Action Expectations

This sub-element contains three Expectations.

1. The company shall maintain procedures for defining responsibility and authority for:
the handling and investigating of non conformances with HSE legislation, regulations, policies, procedures and standards;
the identification of root causes and taking action to mitigate any consequences arising from such non conformances;
the initiation and completion of corrective and preventative actions in response to non conformances;
the confirmation of the effectiveness of corrective and preventative action taken.
2. Any corrective or preventative action taken to eliminate the causes of actual and potential non-conformances shall be appropriate to the magnitude of problems and commensurate with the HSE risks encountered.
3. To prevent non-compliance with standards and procedures a documented system for variance/change control shall be in place (also refer to 5.5 Management of Change) and:
employees shall be aware of the system;
all occurrences of non-conformance, * variance and non-compliance shall documented, investigated and appropriately remedied.
any changes in the documented procedures resulting from corrective and preventative action shall be implemented and recorded

Typical supporting documentation, records and guidelines

Documents and Records -

- Register of legislative non-compliance and status
- Register of non-conformances, corrective action and status
- Procedure for non-conformance
- Legal Compliance Monitoring
- Change Control Procedure

6.3 Performance Monitoring & Records

This sub-element contains four Expectations:

1. The company shall establish procedures to maintain appropriate records to demonstrate conformance to the company HSEMS, Group Requirements/Expectations and international standards. As a minimum:
the records shall be legible, identifiable and traceable to the activities involved with retention times defined.
the records shall be stored and maintained to prevent loss and unintended use.
the records which support the annual or other periodic HSE performance data provided to the Directors shall be kept in an auditable form.

- the records shall be used in HSE improvement planning
2. The company shall regularly measure, record, track and report HSE performance against targets set in the HSE Plan and in maintaining control of HSE-critical activities. Procedures shall be established and maintained for the identification, maintenance and disposition of HSE performance records which should include:
 - Reports of audits and reviews
 - Audit tracking data
 - Situations of non-compliance with HSE policy, and of improvement actions
 - Any incidents and follow-up actions
 - Any complaints and follow-up actions
 - Inspection and maintenance reports of HSE-critical equipment i.e. equipment providing a control and recovery; function.
 - Data obtained from monitoring as input to performance records
 - Results of emergency drills and exercises
 - HSE Training records.-
 3. Regularly updated performance indicators shall be in place to measure the implementation of the HSEMS and identify shortcomings, to monitor HSE performance and to evaluate stakeholder concerns. : These measures maybe proactive (e.g. 'unsafe act auditing', 'site inspections', 'self-assessments', progress an close out of audit action items), or may be reactive (e.g. statistics on incidents, deviations from permissible discharge levels).
 4. - Where equipment is required for performance measurement and monitoring, the - company shall establish and maintain procedures for the calibration and maintenance of such equipment and for data handling and interpretation.

Typical supporting documentation, records and guidelines

Documents and Records

- As described above (including record retention schedules)
- Document Management Procedures
- Web Management Procedures
- Procedure for HSE Data Reporting and Record Keeping

6.4 Incident Reporting and Follow-up

This sub-element contains four Expectations.

1. The company shall maintain procedures for the reporting and investigation of hazardous situations, near misses and incidents, which are compliant with the Company and Group policies and procedures and international standards. The company. shall foster a culture of openness in reporting all incidents and near misses.
2. Incidents shall be investigated in a timely manner, with accountabilities assigned, and progress on recommended actions monitored until close out.
To ensure that these investigations are carried effectively and thoroughly:

employees shall be aware of the incident reporting procedures and participate in incident investigations. .

training shall be provided in incident investigation to appropriate staff throughout the company.

3. Any corrective or preventative action taken to eliminate the causes of potential incidents shall be appropriate to the magnitude of problems and commensurate with the HSE risks encountered.
4. The company shall implement and record any changes in the documented procedures resulting from corrective and preventative action. Lessons learnt from accidents and incidents shall be disseminated to relevant personnel and contractors

Typical supporting documentation, records and guidelines

Documents and Records

- Incident investigation reports and analyses
- Register of follow up on actions arising from incident investigations
- Medium for lateral dissemination of lessons learned
- Incident Reporting and Investigation Procedures

Element 7 Audit

Basic Requirements

An audit programme shall be in place to review and verify effectiveness of the management system.

It shall include audits by auditors independent of the, process, or facility audited.

This HSEMS- element has been sub-divided into three sub-elements with Expectations as follows:

7.1 Audit Plan

This sub-element contains four Expectations.

1. The company shall establish and maintain an audit program and procedure for HSE audits to be carried out in accordance with Group and international standards and regulatory requirements.

The audit programme shall include:

- audits which cover the entire HSEMS
 - external certification audits where appropriate e.g. ISO 14001
 - independent audits led by company auditors or led by International Shareholders on behalf of the Company
 - specific activity or issue audits (e.g. facilities operations, start-up, and occupational health)
2. The company shall establish a rolling (e.g. five year) audit plan which provides: "- HSE audits of all facilities and operations on a fixed time scale appropriate to the facility and the risks associated with the activity or the operation;
 - HSE audits that cover operations and projects which have been contracted out;
 - specific detail for the first year of the plan regarding audit timing/duration, scope and team size/composition.
 3. The company shall maintain an effective control process to ensure that:
 - only personnel, who have received adequate training, shall lead audits. (Refer 7:2 Auditor Competency)
 - audit findings are recorded/prioritised and corrective actions are identified with assigned action parties and targeted completion dates
 - audit findings and follow-up are tracked to final close- out
 - best practices and lessons learned are shared with all locations/assets as appropriate.
 4. Management shall conduct a periodic review of audit findings; follow up action plans, key lessons and effective lateral learning.

Typical supporting documentation, records and guidelines Documents and Records

- • Audit plan or program
- Audit findings and action status reports
- Certification & re-certification programme
- Audit reports
- List of approved audit leaders

- HSE Audit procedure.
- Audit tracking procedure/system

7.2 Auditor Competency.

This sub-element contains four Expectations.

1. Audit procedures shall specify the requirements of audit teams in terms of competency, experience in subject area of the audit and impartiality.
2. An audit focal point or department responsible for the audit process shall co-ordinate the appointment of competent HSE auditors
3. A competence assurance system shall be in operation to define auditor competence and ensure that relevant HSE auditor training is provided.
4. A suitable number of staff from different -areas of the company shall be competent to carry out HSE audits.

Typical supporting documentation, records and guidelines

Documents and Records

Training records
HSE Audit Procedure

7.3 Contractor audits

This sub-element contains two Expectations.

1. Contractors shall provide senior personnel to participate in company led integrated HSE audits of the operations contracted to them.
2. Contractors shall have an HSE Audit process and schedule for audits which includes audits carried out by independent auditors. Records of results of audits, findings and corrective actions are retained.

Typical supporting documentation, records and guidelines.

Documents and Records,

- Company procedures for Contractor HSE Management
- All other Documents and Records as for 7.1 but for contractors and held by contractors

Element 8 Management Review

Basic Requirements

Management shall regularly review the suitability and effectiveness of the HSEMS.

This element contains three Expectations.

1. A formal process shall be in place for top / senior management to review the effectiveness and suitability of the HSEMS in managing HSE risks and ensuring continuous improvement in HSE performance. The Review shall address but not be limited to: "
 - the need to change HSE policies and strategic objectives;
 - the impact of significant organisational, location or activity changes;
 - the HSE concerns of employees, contractors and external stakeholders;
 - the provision of adequate resources and competent personnel to achieve HSE targets objectives and strategies;
 - audit findings;
 - technical integrity for those issues with considerable potential HSE impact
 - verification of closure of corrective actions resulting from HSE reviews, audits, self assessments, inspections and incident investigations and review of legal compliance.
2. Management Reviews of the HSEMS shall take place on an annual basis preferably within the Business Plan cycle and before the preparation of the Annual HSE report to senior management shall assess the completeness and validity of the data used as the basis for submission of the Annual HSE report
3. Performance against annual corporate and department HSE Plans shall be reviewed regularly e.g. quarterly, and the results of these reviews and identified remedial actions shall be documented and monitored until conclusion.

Typical supporting documentation, records and guidelines

Documents and Records

- Annual HSE report
- Report on annual review of HSEMS
- Documented results/actions of quarterly HSE performance reviews
- HS EMS Management Review procedure
- Quarterly HSE performance review procedure

APPENDIX 1

Correspondence between OHSAS 18001, ISO 14001:1996 and ISO 9001:1994

CLAUSE	OHSAS 18001	CLAUSE	ISO 14001:1996	CLAUSE	ISO 9001:1994
1	Scope	1	Scope	1	Scope
2	Reference publications	2	Normative references	2	Normative references
3	Terms and definitions	3	Definitions	3	Definitions
4	OH&S management system elements	4	Environmental management system requirements	4	Quality system requirements
4.1	General requirements	4.1	General requirements	4.2.1	General (1st sentence)
4.2	OH&S policy	4.2	Environmental policy	4.1.1	Quality policy
4.3	Planning	4.3	Planning	4.2	Quality system
4.3.1	Planning for hazard identification, risk assessment and risk control	4.3.1	Environmental aspects	4.2	Quality system
4.3.2	Legal and other requirements	4.3.2	Legal and other requirements	-	-
4.3.3	Objectives	4.3.3	Objectives and targets	4.2	Quality system
4.3.4	OH&S management programme (s)	4.3.4	Environmental management programme (s)	4.2	Quality system
4.4	Implementation and operation	4.4	Implementation and operation	4.2	Quality system
1.1	Structure and responsibility	4.4.1	Structure and responsibility	4.9	Process control
				4.1	Management responsibility
				4.1.2	Organization
4.4.2	Training, awareness and competence	4.4.2	Training, awareness and competence	4.18	Training
4.4.3	Consultation and communication	4.4.3	Communication	-	-
4.4.4	Documentation	4.4.4	Environmental management system documentation	4.2.1	General (without 1st sentence)
4.4.6	Document and data control	4.4.5	Document control	4.6	Document and data control

Clause	OHSAS 18001	Clause	ISO 14001:1896	Clause	ISO 8401:1994
4.4.6	Operational control	4.4.6	Operational control	4.2.2	Quality system' procedures
				4.3	Contract review
				4.4	Design control
				4.6	Purchasing
				4.7	Customer supplied product
				4.8	Product identification and traceability
				4.9	Process control
				4.15	Handling, storage, packaging, preservation and delivery
				4.19	Servicing
				4.20	Statistical techniques
4.4.7	Emergency preparedness and response	4.4.7	Emergency preparedness and response	-	-
4.6	Checking and corrective action	4.6	Checking and corrective action	-	-
4.5.1	Performance measurement and monitoring	4.5.1	Monitoring and measurement	4.10	Inspection and testing
				4.11	Control of inspection, measuring and test equipment
				4.12	Inspection and test status
4.6.2	Accidents, incidents, non-conformances and corrective and preventive action	4.5.2	Non-conformance and corrective and preventive action	4.13	Control of non conforming product
				4.14	Corrective and preventive action
4.5.3	Records and records management	4.5.3	Records	4.16	Control of quality records
4.5.4	Audit	4.5.4	Environmental management system audit	4.17	Internal quality audits
4.6	Management review	4.6	Management review	4.1.3	Management review
Annex A	Correspondence to ISO 14001, ISO 9001	Annex B	Correspondence to ISO 9001	-	-
-	Bibliography	Annex C	Bibliography	Annex A	Bibliography
-	(See OHSAS 18002)	Annex A	Guidance on the use of the specification	-	-

APPENDIX 2

SUGGESTED RECORDS HEALTH AND SAFETY RECORDS (U.K.)

Following the Woolf Report and changes to Civil Justice System.

WORKPLACE CLAIMS

- (i) Accident book entry
- (ii) First aider report
- (iii) Surgery record
- (iv) Foreman' /supervisor accident report
- (v) Safety representatives accident report
- (vi) RIDDOR report to HSE
- (vii) Other communications between Defendants and HSE
- (viii) Minutes of Health and Safety Committee meeting(s) where
accident / matter considered
- (ix) Report to DSS
- (x) Documents listed above relative to any previous accident/matter
identified by the claimant and relied upon as proof of negligence
- (xi) Earnings information where Defendant is employer

Documents produced to comply with requirements of the Management of Health and Safety at Work Regulations 1992

- (i) Pre-accident Risk Assessment required by Regulation 3
- (ii) Post-accident Reassessment required by Regulation 3
- (iii) Accident Investigation Report prepared in implementing the
requirements of Regulations 4, 6 and 9
- (iv) Health Surveillance Records in appropriate cases required by
Regulation 5
- (v) Information provided to employees under Regulation 8
- (vi) Documents relating to the employees health and safety
training required by Regulation 11

WORKPLACE CLAIMS - DISCLOSURE WHERE SPECIFIC REGULATIONS APPLY

SECTION A - Workplace (Health Safety and Welfare) Regulations 1992

- (i) Repair and maintenance records required by Regulation 5
- (ii) Housekeeping records to comply with the requirements of Regulation 9
- (iii) Hazard warning signs or notices to comply with Regulation 7 (Traffic Routes)

SECTION B - Provision and Use of Work Equipment Regulations 1992

- (i) Manufacturers specifications and instructions in respect of relevant work equipment establishing its suitability to comply with Regulation 5
- (ii) Maintenance log/maintenance records required to comply with Regulation 6
- (iii) Documents providing information and instructions to employees to comply with Regulation 8
- (iv) Documents provided to the employee in respect of training for use to comply with Regulation 9
- (v) Any notice sign or document relied upon as a defence to alleged breaches of Regulations 14 to 18 dealing with controls and control systems
- (vi) Instruction /training documents issued to comply with the requirements of Regulation 22 insofar as it deals with maintenance operations where the machinery is not shut down
- (vii) Copies of markings required to comply with Regulation 23
- (viii) Copies of warnings required to comply with Regulation 24

SECTION C - Personal Protective Equipment at Work Regulations 1992

- (i) Documents relating to the assessment of the Personal Protective Equipment to comply with Regulation 6
- (ii) Documents relating to the maintenance and replacement of Personal Protective Equipment to comply with Regulation 7
- (iii) Record of maintenance procedures for Personal Protective Equipment to comply with Regulation 7
- (iv) Records of tests and examinations of Personal Protective Equipment to comply with Regulation 7
- (v) Documents providing information instruction and training in relation to the Personal Protective Equipment to comply with Regulation 9
- (vi) Instructions for use of Personal Protective Equipment to include the manufacturers instructions to comply with Regulation 10

SECTION D - Manual Handling Operations Regulations 1992

- (i) Manual Handling Risk Assessment carried out to comply with the requirements of Regulation 4(1)(b)(I)
- (ii) Reassessment carried out post-accident to comply with requirements of Regulation 4(1)(0)(I)
- (iii) Documents showing the information provided to the employee to give general indications related to the load and precise indications on the weight of the load and the heaviest side of the load if the centre of gravity was not positioned centrally to comply with Regulation 4(1)(b)(iii)
- (iv) Documents relating to training in respect of manual handling operations and training records

SECTION E - Health and Safety (Display Screen Equipment) Regulations 1992

- (i) Analysis of work stations to assess and reduce risks carried out to comply with the requirements of Regulation 2
- (ii) Reassessment of analysis of work Stations to assess and reduce risks following development of symptoms by the claimant
- (iii) Documents detailing the provision of training including training records to comply with the requirements of Regulation 6
- (iv) Documents providing information to employees to comply with the requirements of Regulation 7

SECTION F - Control of Substances Hazardous to Health Regulations 1999

- (i) Risk assessment carried out to comply with the requirements of Regulation 6
- (ii) Reviewed risk assessment carried out to comply with the requirements of Regulation 6
- (iii) Copy labels from containers used for storage handling and disposal of carcinogenic to comply with the requirements of Regulation 7(2A)(h)
- (iv) Warning signs identifying designation of areas and installations which may be contaminated by carcinogenic to comply with the requirements of Regulation 7(2A)(h)
- (v) Documents relating to the assessment of the Personal Protective Equipment to comply' with Regulation 7(3 A)
- (vi) Documents relating to the maintenance and replacement of Personal Protective Equipment to comply with Regulation 7(3A)
- (vii) Record of maintenance procedures for Personal Protective Equipment to comply with Regulation 7(3 A)
- (viii) Records of tests and examinations of Personal Protective Equipment to comply with Regulation 7(BA)
- (ix) Documents providing information. instruction and training in relation to the Personal Protective Equipment to comply with Regulation 7(3 A)
- (x) Instructions for use of Personal Protective Equipment to include the manufacturers instructions to comply with Regulation 7(3A)

- (xi) Air monitoring records for substances assigned a maximum exposure limit or occupational exposure standard to comply with the requirements of Regulation 7
- (xii) Maintenance examination and test of control measures records to comply with Regulation 9
- (xiii) Monitoring records to comply with the requirements of Regulation 10
- (xiv) Health surveillance records to comply with the requirements of Regulation 11
- (xv) Documents detailing information, instruction and training including training records of employees to comply with the requirements of Regulation 12
- (xiv) Labels and Health and Safety data sheets supplied by employers to comply the CHIP Regulations

SECTION G - Construction (Design and Management) Regulations 1994

- (i) Notification of a project form (HSE F 10) to comply with the requirements of Regulation 7
- (ii) Health and Safety Plan to comply' with requirements of Regulation 15
- (iii) Health and Safety file to comply with the requirements of Regulations 12 and 14
- (iv) Information and training records provided to comply with the requirements of Regulation 17
- (vi) Records of advice from and reviews of persons at work to comply with the requirements of Regulation 18

SECTION H - Pressure Systems and Transportable Gas Containers Regulations 1989

- (i) Information and specimen markings provided to comply with the requirements of Regulation 5
- (ii) Written statements specifying the safe operating limits of a system to comply with the requirements of Regulation 7
- (iii) Copy of the written scheme of examination required to comply with the requirements of Regulation 8
- (iv) Examination records required to comply with the requirements of Regulation 9
- (v) Instructions provided for the use of operator to comply with Regulation 11
- (vi) Records kept to comply with the requirements of Regulation 13
- (vii) Records kept to comply with the requirements of Regulation 22

SECTION I - Lifting Plant and Equipment Records of Test and Examination etc.) Regulations 1992

- (i) Record kept to comply with the requirements of Regulation 6

SECTION J - The Noise at Work Regulations 1989

- (i) Any risk assessment records required to comply with the requirements of Regulations 4 and 5
- (ii) Manufacturers' literature in respect of all ear protection made available to claimant to comply with the requirements of Regulation 8
- (iii) All documents provided to the employee for the provision of information to comply with Regulation 11

SECTION K - Construction (Head Protection) Regulations 1989

- (i) Pre-accident assessment of head protection required to comply with Regulation 3(4)
- (ii) Post-accident reassessment required to comply with Regulation 3(5)

SECTION L - The Construction (General Provisions) Regulations 1961

- (i) Report prepared following inspections and examinations of excavations etc. to comply' with the requirements of Regulation 9
- (ii) Report prepared following inspections and examinations of work in cofferdams and caissons to comply with the requirements of Regulations 17 & 18.