Index

Section A - Managing Aspects, Impacts 285
Section B - Sustainable Evaluation and Development 298
Section C - Managing, Setting Objectives and Targets 305
Section D - Competence, Training and Awareness 312
Section E - Managing Environmental Emergencies and Incidents 323
Section F - Waste Disposal 332
Section G - Environmental Monitoring, Audit and Inspection 337

Competence, Training and Awareness 312
Environmental Aspect/Impact Assessment 292
Environmental Aspects and Impacts 287
Environmental Emergencies and Incidents 325
Environmental Monitoring, Audit and Inspection 337, 339
Managing Aspects, Impacts; Environmental Risks Arising from Work Activities 285
Managing Environmental Emergencies and Incidents 323
Managing, Setting Objectives and Targets 305
Objectives and Targets 307
Procedure for Assessing the Environmental Competence of Contractors/Suppliers 314
Procedure for Competence, Training, and Awareness 313
Procedure for Environmental Monitoring, Audit and Inspection 338
Procedure for Managing Aspects and Impacts; Environmental Risks 286
Procedure for Managing Environmental Emergencies and Incidents 324
Procedure for Objectives and Targets; Monitoring and Measurement 306
Procedure for Sustainable Evaluation and Development 299
Procedure for Waste Disposal 333
Sustainable Evaluation and Development 298, 300
Trading Contractor Safety Information 318
Training and Competence 315
Waste Disposal 332, 334

Environmental Forms Index

Significant Aspect / Impact Register 296
Objectives And Targets Improvement Programme 310
Environmental Objectives 311
Training Register for Employees 317
Subcontractor Environmental Questionnaire 319
Environmental Incident Report Form 330
(Non-Hazardous) Waste Transfer Note 336
Workplace Environmental Inspection Check Sheet 341

SECTION A

Arrangements for Managing Aspects, Impacts; Environmental Risks Arising from Work Activities

Roxwell Ltd will establish and maintain (a) procedure(s) to identify the environmental aspects of its activities, products or services that it can control and those over which it can be expected to have an influence, in order to determine those which have significant impacts on the environment.

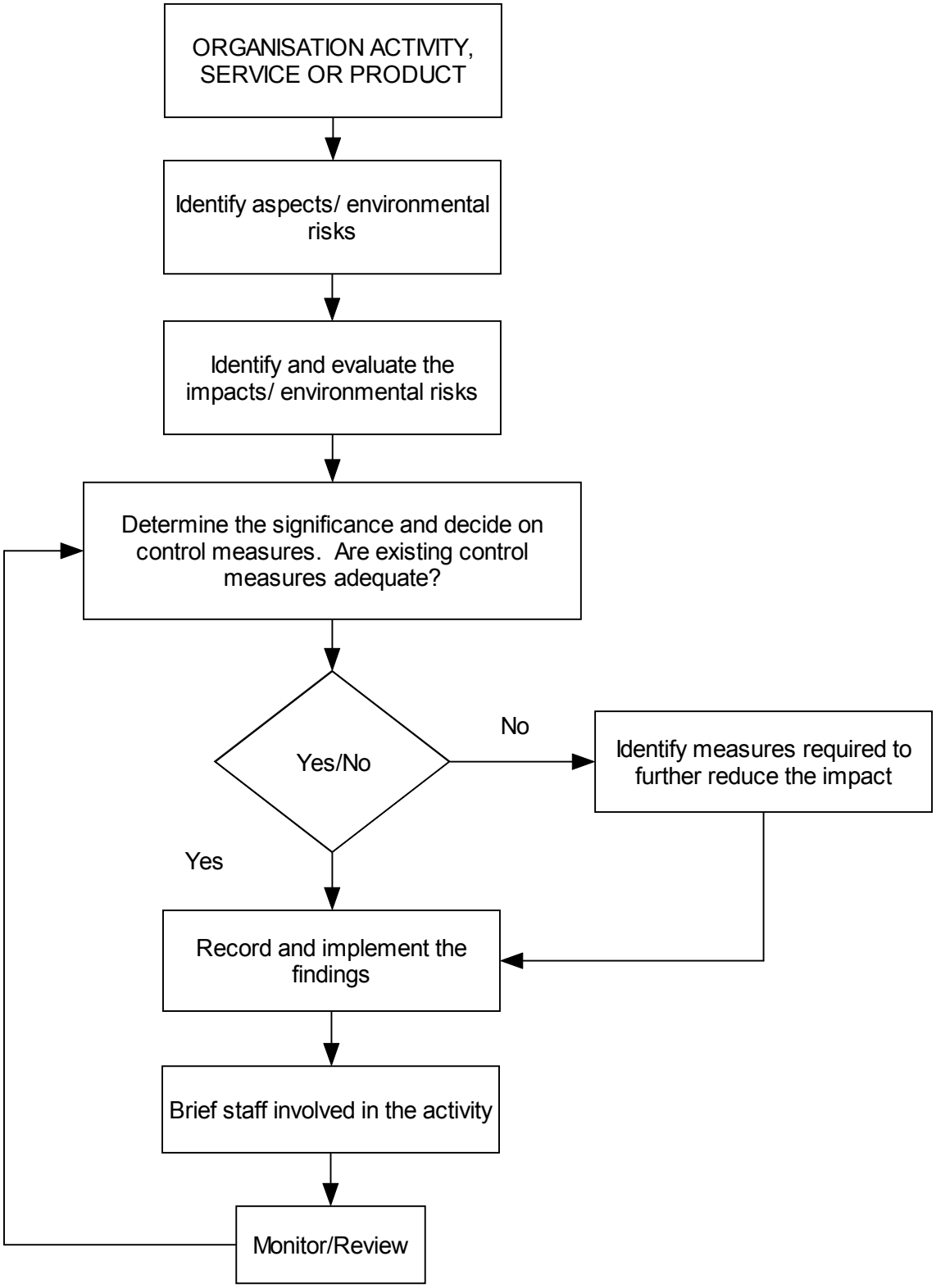
Roxwell Ltd will ensure that all aspects related to the significant impacts from its activities, products and services are considered when setting its environmental objectives.

Procedures to identify all environmental aspects of the organisation's activities, services and products will be developed by **Stephen Ewin, Stuart Herridge, and the Contracts Managers**. **Stephen Ewin, Stuart Herridge, and the Contracts Managers** shall be responsible for ensuring procedures are in place to determine which environmental aspects (past, present and potential) have had, have and can have a significant impact on the environment.

The Contracts Managers and the Admin Staff shall be responsible for ensuring that the organisation's aspects, impacts and environmental risks are identified and for ensuring that the control measures are implemented and communicated to employees.

The Contracts Managers and the Admin Staff shall ensure the information on significant environmental aspects is continually updated, taking into account new activities, products, services etc.

Procedure for Managing Aspects and Impacts; Environmental Risks



Environmental Aspects and Impacts

INTRODUCTION

Before an organisation introduces any new environmental management measures, an environmental review must be carried out. This involves analyzing current working practices to assess how all the organisation's activities interact with and can affect the environment.

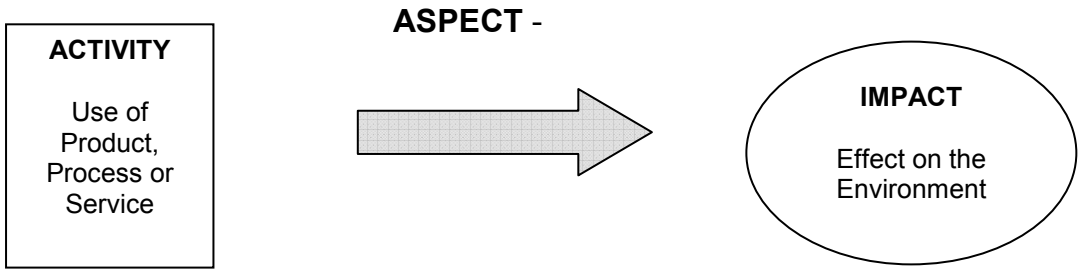
The purpose of an environmental review is to gather information about the environmental aspects of an organisation and their impact on the environment. The information helps the organisation decide which aspects are the most important and what measures, if any, should be taken to reduce harm to the environment.

Definitions:

Environmental Aspects – any part of an organisation's activities, products or services that can interact with the environment;

Significant Environmental Aspects – the most important aspects which an organisation should concentrate on improving;

Environmental Impacts – an effect on the environment whether adverse or beneficial that results entirely or partly from an organisation's activities.



CONDUCTING A REVIEW

The review must include the environmental aspects associated with the inputs, operations, outputs and management of an organisation. The organisation must also identify aspects associated with potential; accidents, emergencies and incidents, those associated with abnormal operations, such as start-up and shut-down procedures, maintenance, and any other relevant environment legislation, regulations or codes of practice.

ENVIRONMENTAL ASPECTS

An organisation's environmental aspects are those activities, products or services that can interact with the environment. They include but are not limited to transport choice, energy usage, water consumption and waste disposal. Aspects can be categorised into two types, Direct Aspects and Indirect Aspects

Direct Aspects are those over which an organisation has a high degree of control or can reasonably expected to have an influence, such as:

- gaseous emissions;
- effluent discharges;
- energy consumption;
- water consumption;
- materials handling and storage;
- waste management;
- transportation;
- noise and other nuisances.

Indirect aspects are those which are largely beyond the control of the organisation. Although they are generally harder to identify and quantify, they must still be considered in an environmental review. They may include:

- aspects of suppliers' or subcontractors' activities;
- organisation investments;
- use and disposal of products;
- some aspects of service activities.

The methodology is similar to the approach used for managing occupational health and safety risks and relates to the way these can be managed. There are four stages in the process;

1. Select an activity, product or service (Categorize operating conditions);
2. Identifying any environmental aspects associated with the selected activity, product or service;
3. Identifying any actual potential, positive or negative, environmental impacts associated with each identified environmental aspect;
4. Evaluate the significance of each identified environmental impact.

Activity/Product/Service	Aspect	Impact
Activity – Handling of Hazardous Chemicals	Potential for Accidental Spillage	Contamination of soil or water
Product – Product Refinement	Reformation of the product to reduce volume	Conservation of natural resources
Service – Vehicle maintenance	Exhaust emissions	Reduction of air emissions

1. Selecting an activity, product or service (categorize operating conditions)

The organisation should select categories of activities, products or services to identify those aspects most likely to have significant impact. This should be as broad as possible initially and relies on the experience and knowledge of participating employees, because many aspects will not be known by managers.

In order to make the task manageable, activities or services may be classed or grouped into areas such as;

- geographical areas within / outside the organisation's premises;
- stages in a production process, or in the provision of services;
- planned work and reactive work (e.g. work carried out that is reacting to an unplanned event);
- defined tasks (e.g. driving, waste disposal);
- identified working groups.

The process should not be restricted to core manufacturing or service activities and should consider support activities (cleaning) and administrative activities (energy and resource use). Past, current and planned activities, products and services should be considered.

Categorizing operating conditions

Consideration should be given to the type of operating conditions, normal and abnormal, and any potential emergency situations;

- Normal
  - the day to day operation of a business / plant;
- Abnormal
- shutdown and start up situations (stop-start)
  - maintenance situations;
  - periodic increases in production capacity or the frequency of service delivery;
- Emergencies
  - situations arising, from a chemical spill, fire or flood.

2. Identifying environmental aspects of the activity, product or service

The aim is to identify as many interactions as possible with the environment, both beneficial and adverse, associated with the selected activity, product or service. Where relevant, the organisation should consider;

- Emissions to the air;
- Releases to water;
- Waste management;
- Contamination of land
- Uses of raw materials and natural resources;
- Other local environmental and community issues.

3. Identifying environmental impacts

The relationship between an environment aspect and impact can be summarized as 'cause' and 'effect' – with an aspect leading to an impact (positive or negative). The aim is to identify as many actual or potential, positive or negative, environmental impacts as possible with each associated aspect.

Environmental impacts can be categorized by environmental magnitude. In the list below, globalised impacts are at the top whereas localised impacts are at the bottom. This list in non-exhaustive and there are further impacts that could be considered:

- **Greenhouse effect** - the stratospheric accumulation of some gases that may lead / contribute to climate change;
- **Ozone Depletion** - degradation products of CFC's, react and destroy the ozone layer;
- **Natural resources** - consumption of non-renewable resources;
- **Acid rain** - reaction of acidic ions with water in the atmosphere;
- **Surface water** - pollution of watercourses, rivers etc.;
- **Local air quality** - local accumulation of airborne pollutants;
- **Waste burden** - air/water/soil pollution caused by waste disposal;
- **External noise** - amenity impact on neighbours of noise and vibration;
- **Soil and Ground water**- pollution of soil and groundwater;
- **Ecological habitat** - loss of flora (plant life) and fauna (animal life)
- **Bioaccumulation of toxins** – some compounds persist in the environment leading to possible bioaccumulation and toxic effects.

4. Determining the significance of environmental impacts

The relative significance of the same environmental impact can vary between organisations and locations. What may be considered significant in one organisation may be considered minor in another.

Evaluating the significance of environmental impacts is a subjective and involves considering both environmental issues and business concerns:

Typical environmental issues:

- The scale of the impact;
- The severity of the impact;
- The probability of occurrence;
- Duration of the impact, and

Typical business concerns:

- Potential regulatory and legal exposure;
- Difficulty in changing the impact;
- Cost of changing the impact;
- Effect of change on other activities or processes;
- Concerns of interested parties;
- Effect on the public image of the organisation.

Ideally, significance should be determined with reference to a combination of three factors:

1. environmental assessment of the impact;
2. liability considerations;
3. stakeholder priorities.

Financial considerations cover business and commercial repercussions for the organisation arising from environmental impacts (actual and potential). Stakeholders include regulators, customers, investors, the local community and pressure groups. The organisation will need to evaluate which stakeholder priorities are likely to be the most important to them.

The requirements of regulators should be considered as a priority. Critical operational priority, because in many circumstances business operations can be forced to cease where they are shown to have a negative impact that is not appropriately mitigated. You will often need to contact the regulator in advance of conducting certain operations or activates that cause negative environmental impacts.

All three factors are subject to constant change. Scientific advances are increasingly identifying environmental issues that drives changes in environmental law and methods of best practice. Stakeholder priorities are likely to respond to changing social attitudes and the level of environmental information available.

For determining significance, you may wish to review all applicable evidence:
- Regulatory permit/consent/authorizations and emission controls;
- Sector application guides;
- Guidance notes from regulators and industry associations;
- Environmental impact assessment reports and statements;
- Occupational health and safety reports and audits
- Stakeholder evaluation surveys;
- Independent audits and assessments;
- Public registers;
- Local authorities
- Scientific journals.

Quantification can aid judgement. Scoring systems can be used to define any criteria and ensure the system remains consistent. Scoring systems can be used in conjunction with risk assessment techniques to identify significant environmental impacts and the extent to which these are controlled.

Environmental Aspect/Impact Assessment

INTRODUCTION

Environmental aspects are things that cause an environmental impact. For example, one of the environmental aspects of driving a car (activity) is the emission of exhaust fumes (environmental aspect). The reason this is an environmental aspect is because fumes cause air pollution (environmental impact). At the other end of the scale, gas consumption from a gas boiler operation is an environmental aspect because its use in heating (activity) results in a reduction of a non-renewable resource (environmental impact).

The environmental aspects of the organisation must be identified and assessed to determine those that are the most significant. This then enables resources to be focused on addressing specific aspects. This is an on-going process, therefore the aspects must be reviewed on a regular basis to ensure that all current aspects have been identified and that they are correctly prioritised (continuous improvement).

IDENTIFICATION

Identify the inputs and outputs to and from the organisation's activities and then identify the environmental aspects and impacts that arise from these inputs and outputs. This should include (where applicable) identification of direct and indirect environmental aspects with awareness of organisational control or influence, and those aspects arising from normal, abnormal or reasonably foreseeable emergency conditions.

To assist in the identification of the organisation's environmental aspects process flow diagrams can be used. If they are to be used, a diagram will be required for each activity, e.g. handling of hazardous chemicals, maintenance of equipment and heating etc. It should be noted that these are general activity groups and further flow diagrams may be required for specific activities within each of these groups.

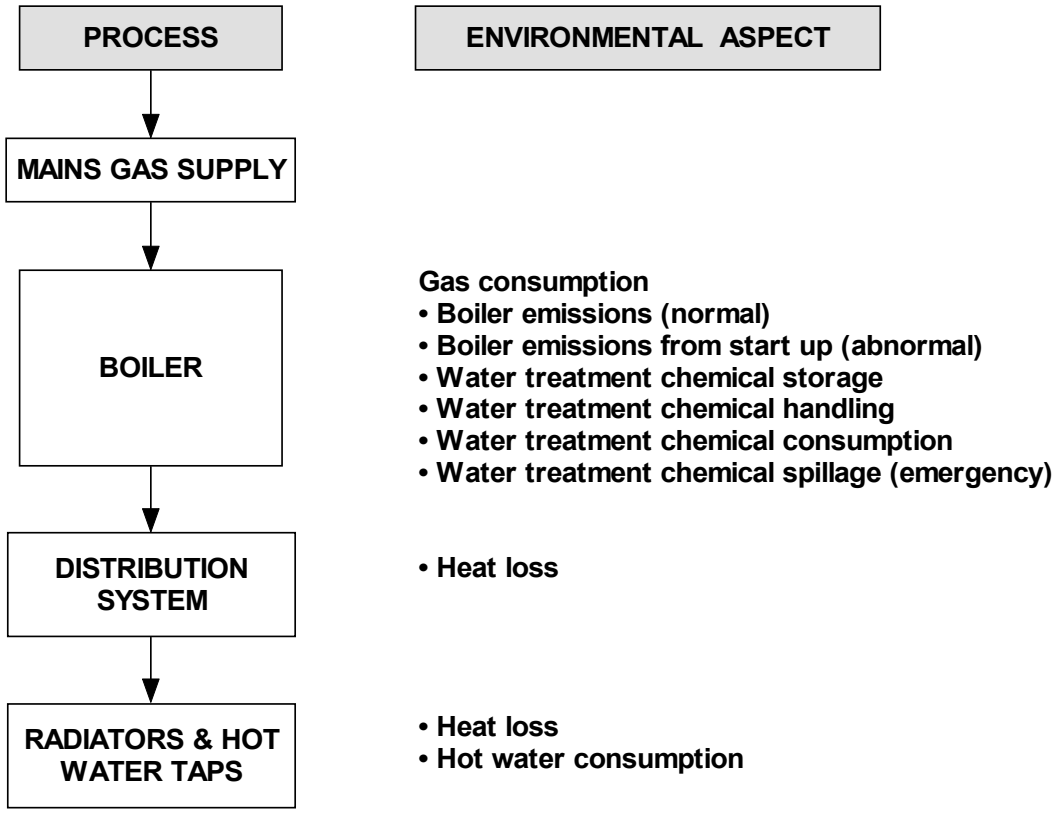
The identification process shall cover the aspect categories listed in the following bullet points and shall consider the findings of the Preliminary Environmental Review. It should be noted that not all categories will necessarily be applicable to all parts of the organisation or all stages of a process. Consideration should also be given to the indirect environmental aspects such as the supply of materials.

Aspects Categories:

- Air emissions;
- Energy;
- Materials (Procurement);
- Materials (Storage and Use);
- Releases to Water;
- Waste Management;
- Water;
- Other issues.

Record each environmental aspect in the Significant Aspect / Impact Register, with the required information. Where appropriate, group together similar aspects of a minor nature as a single aspect for further consideration.

HEATING - Example



Aspect / Impact Assessment

The aim of an aspect / impact assessment is to determine which of the identified environmental aspects are significant. In many circumstances, professional judgement will play an important role in determining how to address significance and this can be helped through consultation with appropriate stakeholders. It is the significant aspects that will be controlled within the Environmental Management System (EMS). Significance is determined by identifying the level of control on each environmental aspect and the severity of the environmental impact related to each aspect.

Method - Taking each aspect in turn, identify a Control and Severity rating. This is a subjective exercise and the results may require review during the process. The Rating Matrix can be used as a guide for determining relative significance.

Control - Identify a Control rating from the 'Control scale' on the Rating Matrix.
To do this consider;

- The details provided in the Environmental Aspect / Impact Register;
- The descriptions in the Control Rating Assessment Table;
- The list of Control Factors, or any other options that may be relevant;
- The ratings given to other Environmental Aspects.

Control Rating Assessment Table

Rating	Description
5 Negligible or no control	Control of the aspect is nonexistent or totally ineffectual. There are no controls and knowledge of the environmental impact is negligible.
4 Slight degree of control	There are some controls in place (either procedures or physical) and there is some awareness of a control requirement. Such controls only have limited effect on reducing the relevant environmental impact.
3 Low degree of control	There is recognisable control on the aspect. This may include procedures, management controls or physical controls, but they are not totally effectual and implementation / use of them are not comprehensive.
2 Medium degree of control	There is significant control on the aspect through procedures, management control and physical controls. Relevant parties are aware of such controls and they are generally affectively applied.
1 High degree of control	All (or practically all) necessary procedures, management controls and best practice have been implemented and compliance with such procedures and best practice is high. The impact has been minimised to very significant extent.

Control Factors

- Compliance with Environmental Legislation and other requirements etc.;
- Environmental control procedures (e.g. waste handling, energy consumption through lights and appliances);
- Compliance with environmental control procedures;
- Environmental control, e.g. bunded storage facilities, handling apparatus, abatement technology, spill kits etc.;
- Knowledge of an impact;
- Maintenance of associated machinery, plant and equipment;
- Records of an Environmental Impact;
- Environmental awareness training including competency;
- Accident and emergency training e.g. simulated spillage response training etc.;
- Monitoring of environmental aspects and impacts;
- Compliance with minimisation initiatives.

Severity

Identify a Severity rating from the ‘Severity scale’ on the Rating Matrix.
Consider:

- The details provided in the Environmental Aspect / Impact Register;
- The descriptions in the Severity Rating Assessment Table, the list of Aspect Impact Parameters, or any other options that may be relevant;
- Comparison to the ratings given to other Environmental Aspects.

Rating	Description
5 Severe	The parameters of the aspect / impact are comparatively high and combined in a manner that causes, or can cause, severe environmental damage, major pollution, e.g. permanent / long-term environmental damage / impacts.
4 High	The parameters of the aspect / impact exist at a level that does or will cause environmental damage, but the damage is not permanent or is only medium term.
3 Medium	The parameters of the aspect / impact all exist at recognisable levels and are / can cause environmental damage, but such damage is short term and always repairable.
2 Low	Some of the parameters exist at recognisable levels and are (can) result in environmental change, but the effect of such change is easily recoverable or self recovering, and there is no lasting impact.
1 Insignificant / positive	None of the relevant parameters exist at a level that can cause environmental change, or the aspect results in a positive environmental effect.

Aspect / Impact Parameters

- Quantity (volume and / or rate of emission or consumption);
- Toxicity (e.g. environmental threat);
- Existence of applicable legislation;
- Frequency of occurrence (normal operating conditions only);
- Likelihood of occurrence (abnormal / emergency situations only);
- Transmission effectiveness of pathway;
- Sensitivity of environmental receptor (an environmental target that could be degraded by the escape of the hazard);
- Public perception of environmental aspects;
- Number of complaints received;
- Completion of environmental improvement programmes;
- Size, nature, frequency, likelihood and duration of the environmental impact;
- The sensitivity of the receiving environment and the extent to which the impact is reversible;
- The extent to which the impact (or the activity, product or service which causes it) is covered by environmental laws and regulations, or contractual requirements; and,
- The importance of the impact to interested parties - e.g. employees, neighbours, regulators.

SIGNIFICANT ASPECT / IMPACT REGISTER

ACTIVITY / PRODUCT / SERVICE	ASPECTS	IMPACTS	SEVERITY (S)	CONTROL (C)	RATING (S x C)	COMMENTS

Significant Aspect / Impact Register

Significance Assessment Coding

To ensure that the assessment is auditable specify the reason for significance, based on both the control and rating, in the Environmental Aspect / Impact Register;

To enable significance to be determined calculate a Rating Number for each Environmental Aspect. This is the product of its Control and Severity ratings e.g. Control of 5 and Severity of 3 gives a Rating Number of 15 (significant aspect as detailed in the rating matrix).

Record the Rating Number in the Significant Aspect / Impact Register.

Rating Matrix

A ‘traffic light’ system has been developed to prioritise the impacts. **Red** indicates that the aspect is significant; **amber** indicates that the impact could become significant and **green** indicates that the impact is not deemed significant.

			CONTROL				
			Negligible	Slight	Low	Medium	High
			5	4	3	2	1
SEVERITY	Severe	5	25	20	15	10	5
	High	4	20	16	12	8	4
	Medium	3	15	12	9	6	3
	Low	2	10	8	6	4	2
	Insignificant / Positive	1	5	4	3	2	1

SECTION B

Arrangements for Sustainable Evaluation and Development

Roxwell Ltd take into account the principles of sustainable development in conducting its administrative, commercial and social activities, using the procurement of materials from local, sustainable sources.

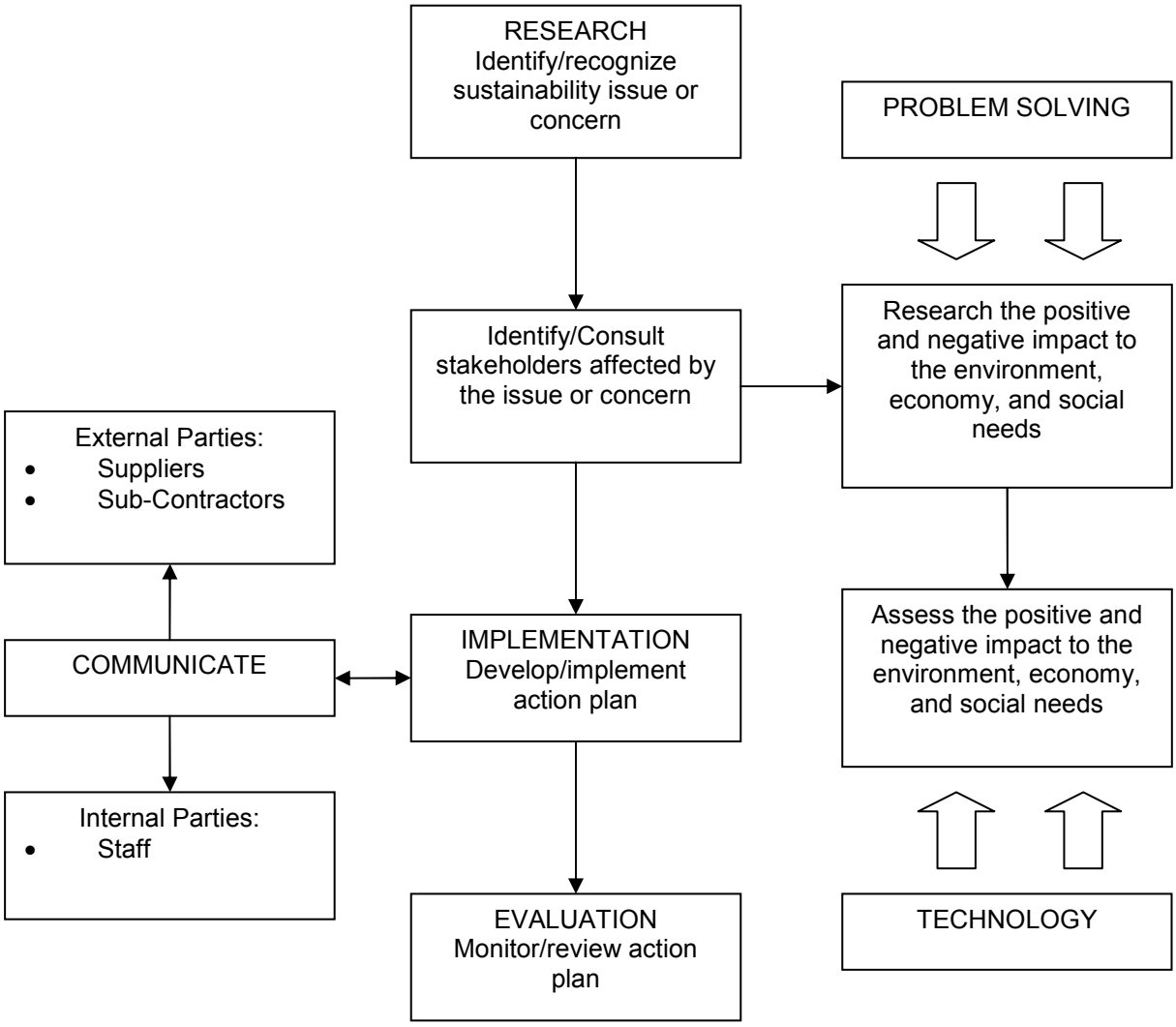
It is the aim of Roxwell Ltd to prevent pollution, minimise our inputs of utilities and resources and the outputs of emissions to the atmosphere, effluents to waters/sewers and wastes to disposal facilities; endeavouring to re-use, recover or recycle materials where practicable, or safe disposal where not.

Stephen Ewin, Stuart Herridge, and the Contracts Managers shall be responsible for identifying the strengths, weaknesses, opportunities and threats of the organisation to develop and implement strategies (action plans) for sustainable development.

Monitoring and measuring of sustainable development and strategies will be carried out by **Stephen Ewin, Stuart Herridge, and the Contracts Managers**.

David Thickbroom, Stephen Ewin and Stuart Herridge has overall responsibility for the performance and management of strategies for sustainable evaluation and sustainable development, including the provision of resources essential to their implementation.

Procedure for Sustainable Evaluation and Development



Sustainable Evaluation and Development

INTRODUCTION

The guiding principle of sustainable development is; development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development recognises the interaction and dependence of environmental, social and economic needs.

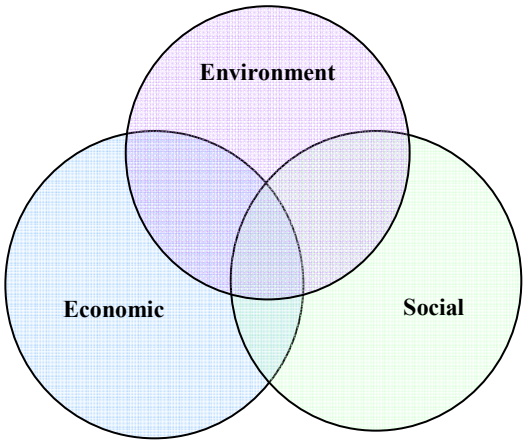
Definitions:

Environmental Sustainability: The rates of renewable resource harvest, pollution creation, and non-renewable resource depletion that can be continued indefinitely. If they cannot be continued indefinitely then they are not sustainable.

1. For renewable resources, the rate of harvest should not exceed the rate of regeneration (sustainable yield);
2. [For pollution] the rates of waste generation from projects should not exceed the assimilative capacity of the environment (sustainable waste disposal); and
3. For non-renewable resources the depletion of the non-renewable resources should require comparable development of renewable substitutes for that resource.

Social Sustainability: The ability of a social system, such as a country, to function at a defined level of social well-being indefinitely: individual needs such as those for health and well-being, nutrition, shelter, education and cultural expression should be met.

Economic Sustainability: The ability of an economy to support a defined level of economic production indefinitely. Three main components of sustainability:



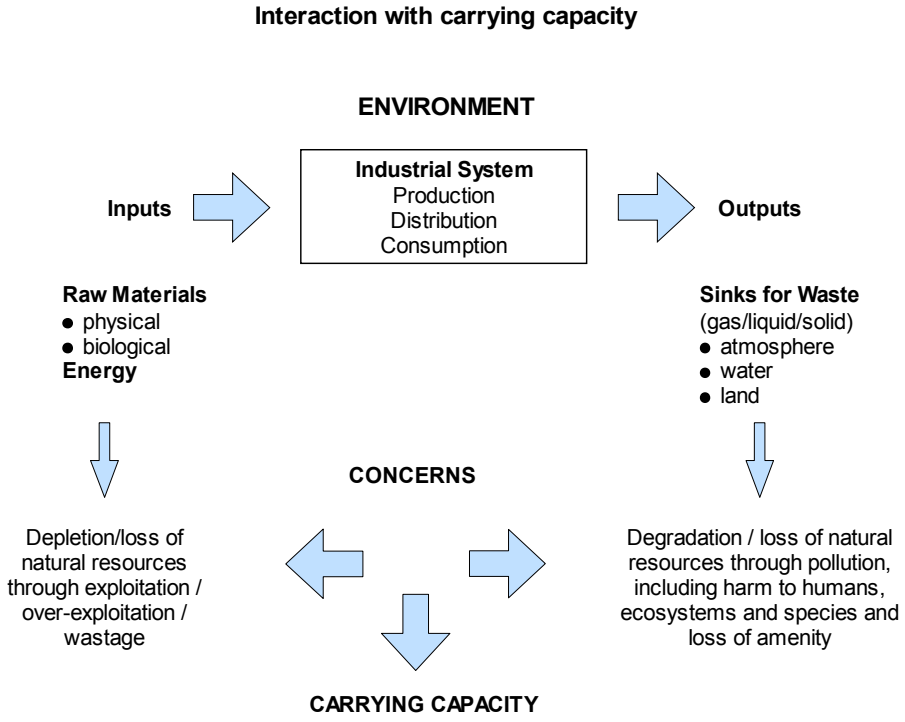
Objectives

The aim of sustainable development is to balance our economic, environmental and social needs, allowing prosperity for now and future generations. Sustainable development consists of a long-term, integrated approach to addressing economic, environmental, and social needs, whilst avoiding the over consumption of key natural resources. Sustainable development encourages us to conserve and enhance our resource base, by gradually changing the ways in which we develop and use technologies.

Securing economic development, social equity and justice, and environmental protection is the goal of sustainable development.

Sustainability and carrying capacity

Pressures on the earth's natural sources are raising concern about these sources' ability to maintain quality of life or to support present and future populations. There is concern that the 'carrying capacity' (supply and demand) of the earth is at risk of being exceeded by the growth in demand for resources (including 'sinks' to dispose of wastes) and by the degradation of essential resources through the impact of human activities. Carrying capacity is a key sustainability issue.



The nature of resources

Resources are essentially those items that are of use to society – whether to provide, water, food, shelter, heat or light. Resources can also include waste 'sinks'.
The fundamental distinction between renewable and non-renewable resources is shown in the following table:

Type	Characteristics	Examples	Concerns
Renewable (flow)	Resources that can be replaced within immediate or short term timescales by natural processes that tend to be related to planetary cycles.	Vegetation: • Forests • Crops Animals: • Wildlife • Domestic livestock • Fish stocks Water, Wind, Sunlight	Availability depends upon the balance between the rate of use and the rate of replacement.
Non-renewable (stock)	Resources that have been created over a geological timespan, and which can only be replaced over similar timescales.	Fossil fuels: • Oil, gas, coal Mineral ores: • Iron, bauxite (metals) Stone and Aggregates (construction materials)	In human terms, these are finite resources and will ultimately be depleted. The depletion timescale is dependant on the amount of resource remaining and exploitation rate.

Resource depletion is a major concern. Environmental practices should seek to:

- Reduce wastage of resources
- Reduce consumption and dependency,
- Consider renewable alternatives to finite energy and material resources,
- Ensure renewable resources are replaced (e.g. plant new trees to offset cut timber).

Environmental management and sustainable development

Sustainable development is a process not a goal and sets out four processes that need to be undertaken at the same time to work towards greater sustainability:

- Social progress that meets the needs of everyone,
- Effective protection of the environment,
- Prudent use of natural resources,
- Maintenance of high and stable levels of economic growth and employment.

Sustainability is a strategic issue combining the identification and evaluation of significant environmental aspects and the development of policy objectives and targets for the future

Sustainable development is the framework that will define the future operating parameters of an organisation – determining what it can do and what it can sell (commercially).

Role of business in sustainable development

Business has an influential role in promoting production and consumption practices that are more sustainable;

- Research and development, design and production of new technology,
- Initiating change and innovation,
- Influencing customer choice – developing new markets,
- Creating wealth and employment, hence livelihood opportunities,
- Selecting and using natural resources – materials and energy,
- Generating waste – devising more efficient processes and products to minimize such waste.
- Monitoring strategies

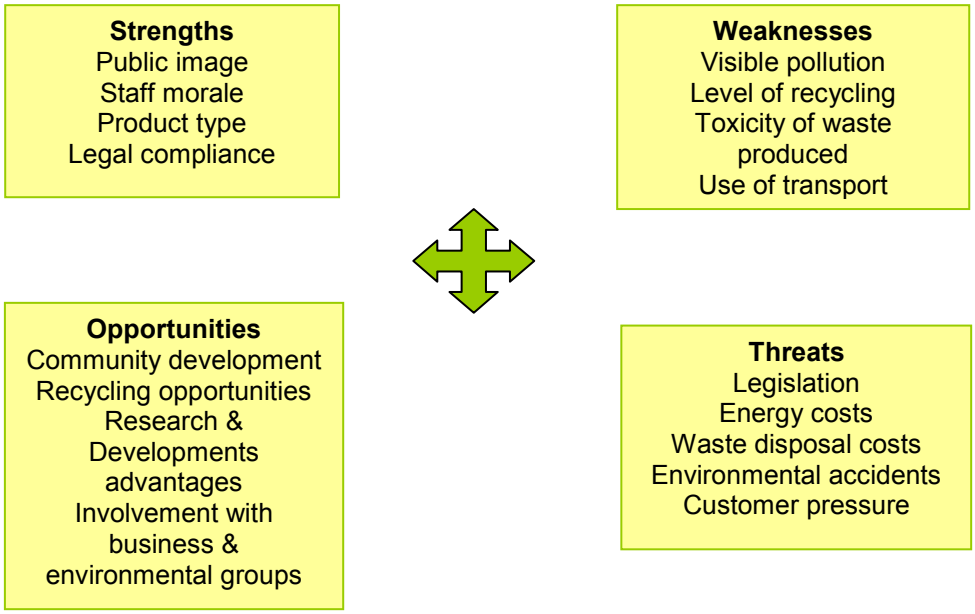
To ensure strategies for sustainable development are successful, measuring and analysing sustainability is necessary. Strategic choices should be actively monitored to identify impacts on sustainability. This is a very broad area, but could include:

- Changes in human resources such as new employees, offices or redundancies.
- Goods, products and services
- Outsourcing for materials
- Subcontracting work
- Cash flow forecast that affects ability to meet sustainability obligations
- Employee awareness of sustainable policy

Note: strategic planning will change over time and so will social, economic and environmental conditions.

SWOT Analysis

A useful technique to assess the implications of external developments is to conduct a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of the organisation. SWOT helps managers to focus on the strengths and weaknesses (internal to the organisation) together with the opportunities open to it and the 'threats' (external to the organisation) it may face. A SWOT analysis should be carried out by an individual or a team of people who have significant knowledge of the organisation's activities.



Polluter Pays Principle

This principle recognises that the polluter should pay for any environmental damage created, and that the burden of proof in demonstrating that a particular technology, practice or product is safe should lie with the developer/producer, not the general public.

One way to adequately implement the polluter pays principle in the real world makes use of what are known as assurance bonds. Money put up by the "polluter" to insure against a worst case environmental impact, the bond would be recovered only if after sufficient time it had been demonstrated that the technology, process or product in question had been deemed to be safe as was reasonably acceptable. Alternatively, if damage occurred, the bond would be used for environmental restoration, and to pay damages to anyone who had been harmed. By allowing the bond to accrue interest, the "polluter" receives an incentive to ensure that best environmental practice is followed, and to demonstrate that the technology, process or product is as safe as is practicably possible, without involving excessive cost.

SECTION C

Arrangements for Managing, Setting Objectives and Targets

In order to make continual improvements to our environmental performance, Roxwell Ltd recognises the need to set achievable objectives and targets, implementing them through environmental improvement programmes.

Roxwell Ltd's objectives and targets will be consistent with our environmental policy statement. **David Thickbroom** will endorse and provide overall direction on environmental issues.

David Thickbroom, Stephen Ewin and Stuart Herridge shall be responsible for implementing environmental aspects of the Safety, Health and Environmental Policy on a day to day basis.

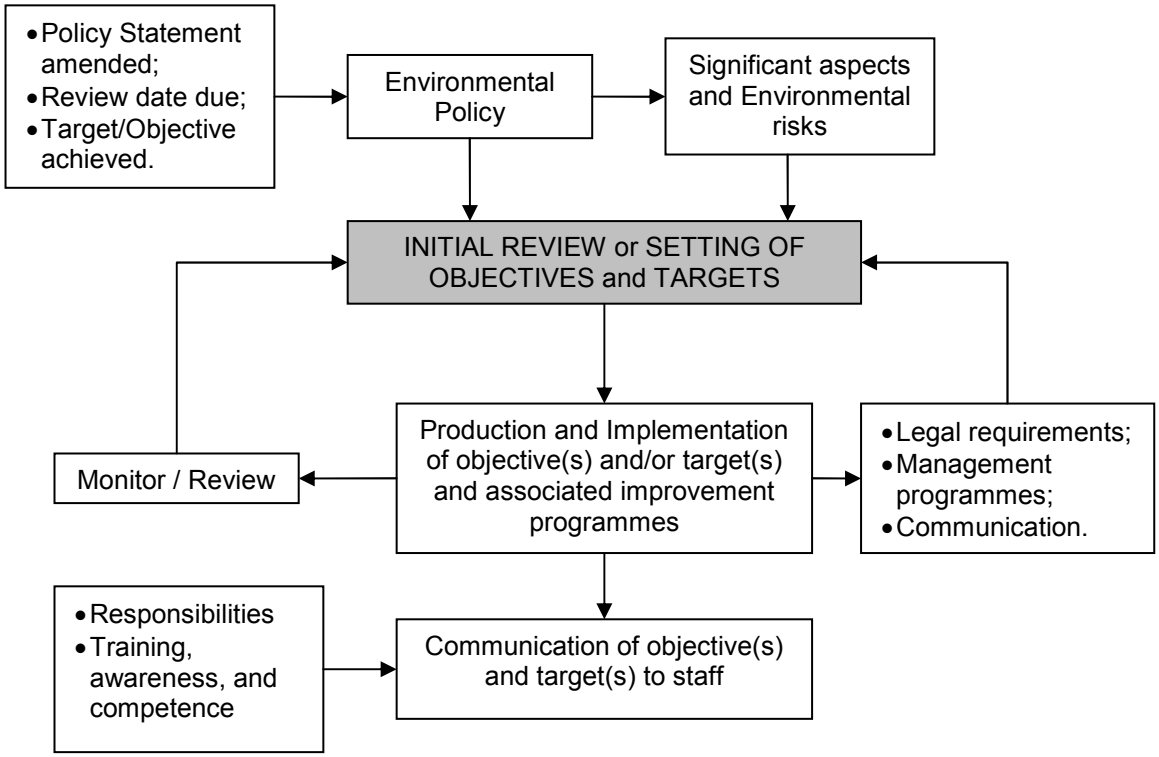
Any actions needed to ensure targets are properly managed, monitored and measured will be identified throughout the year and appropriate action undertaken by **Stephen Ewin, Stuart Herridge, the Contracts Managers, and the Site Managers** with the assistance from relevant departments and staff.

David Thickbroom is responsible for ensuring adequate resources essential to the implementation and control of organisation objectives including personnel, specialised skills, technology and financial resources.

Stephen Ewin and Stuart Herridge and employee representatives will identify, evaluate and recommend ideas for improvement programmes, objectives and targets.

A systematic audit by **Stephen Ewin, Stuart Herridge, the Contracts Managers, and the Site Managers** of the organisation's activities will help determine if the objectives and targets are being met. The results of these audits will be presented to senior management as part of Roxwell Ltd's formal review.

Procedure for Objectives and Targets; Monitoring and Measurement



Objectives and Targets

INTRODUCTION

Organisations need to set some objectives and targets in order to achieve their environmental policy. Objectives and targets set specific goals for action, providing a measurable direction and time table (timescale) for achieving the intentions detailed within the organisation's environmental policy.

Definitions:

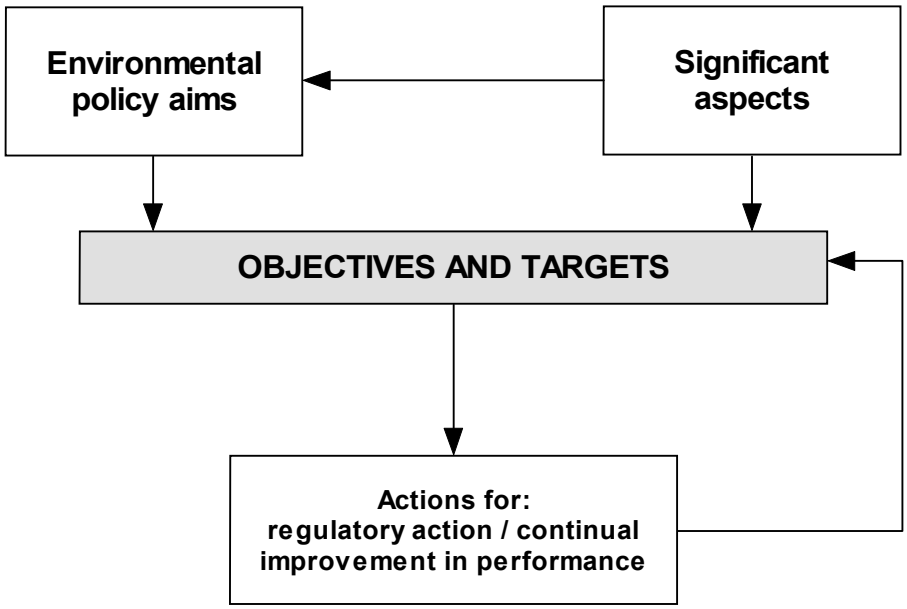
Environmental Objective – an overall environmental goal that an organisation sets itself to achieve.

Environmental Target – a detailed performance requirement that helps an organisation to meet environmental objectives.

Setting Objectives and Targets:

When setting the organisation's Objectives and Targets, the best persons to set these are the actual people who will be responsible for meeting them. Objectives should be based on accurate information about current performance levels and should include the following considerations:

- regulatory and other requirements;
- an organisation's most significant environmental aspects;
- the environmental policy;
- an organisation's broader objectives i.e. financial options, technological options.



An essential management principle is that objectives and targets should aim to be '**SMART'**:

Specific	Objectives and targets should be clear and unambiguous. They should be expressed in terms of specific results required. Responsibility should be assigned for their achievement.
Measurable	They should be quantifiable so that progress can be seen, and achievement or failure quickly identified. Key performance indicators can be used to gauge performance.
Agreed	Individuals or teams responsible for achieving the goal should have the opportunity to comment on it, understand and accept its value.
Realistic	Objectives and targets should be challenging but achievable. Objectives and targets must be realistic in terms of resources available and the demands of other business priorities.
Timebound	They should have a date by which the goal should be achieved. This helps ensure action takes place within the agreed time frame. Where the time scale is considered long, interim milestones to monitor and access progress.

Activities

Planned objectives and targets form a major part in reducing the environmental impact of an organisation's activities. A review of the organisation's activities should be carried out to gather information (through feasibility studies, trials and investigations) to enable careful planning.

Every activity needs to be carefully planned if it is to meet its objectives and targets and involves:

- defining the scope and purpose of the activity:
  - does the activity relate to the whole organisation or a single department?
  - does it have a specific lifetime or is it a long term activity?
  - what objective is the activity supposed to fulfill?

- developing a schedule:
  - establish a time table;
  - set periodic targets;
  - review progress.

- allocating resources:
  - adequate time, staff and finances to ensure success.

- assigning roles and responsibility:
  - allocate overall responsibility;
  - appropriate training, competence & knowledge;
  - specialist skills / qualifications;
  - product / process knowledge;
  - monitoring and review of progress.

Measuring and Monitoring Performance

Environmental management activities require quantifiable performance indicators to enable an assessment of whether objectives and targets are being met. Environmental performance indicators allow the organisation to:

- assess whether activities are effective;
- assess performance against the organisation's targets as well as against sector benchmarks;
- compare performance across different sites or departments within the organisation;
- monitor trends over time and identify potential problems before they occur;
- communicate achievements to senior management and stakeholders.

Selecting environmental performance indicators can be straightforward, but should involve the following considerations:

- they should be quantifiable;
- comparable with standard indicators (as used by regulators);
- they should be a direct measure of performance (i.e. energy usage measured in kilowatt hours and not financial cost;
- they should be normalized rather than absolute i.e. measuring energy usage as kilowatt hours per product per year. This will help identify if increased energy consumption is due to increased production and also compare energy consumption across similar sites.

A systematic audit of the organisation's activities will help determine if the objectives and targets are being met.

OBJECTIVES AND TARGETS IMPROVEMENT PROGRAMME

Objective:	Significant Aspects:

Target	Responsibility	Completion Date	Key Performance Indicators	Progress

Authorized By:	Date:

ENVIRONMENTAL OBJECTIVES:

Item	Environmental Objective	Target	Action By	Completion Date	Progress

Environmental Objectives

SECTION D

Arrangements for Competence, Training and Awareness

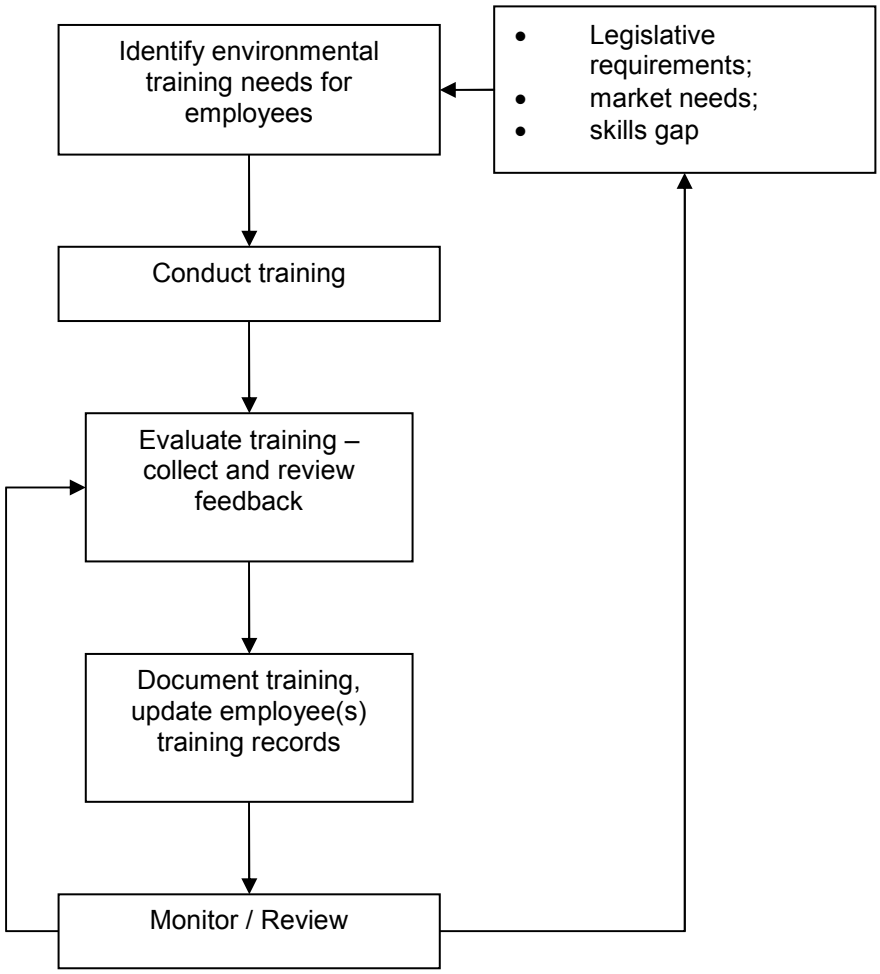
All employees must receive sufficient training to undertake their responsibilities effectively and competently. Roxwell Ltd recognise that it is important to train all our staff in general environmental awareness and emergency preparedness, in particular to activities, products and services relating to our operations.

The Admin Staff will identify environmental training requirements of different job types, processes and emergency response to maintain the environmental skills base. Additional training needs or requirements will be identified through the staff annual appraisal process by the employee's immediate Manager or Supervisor.

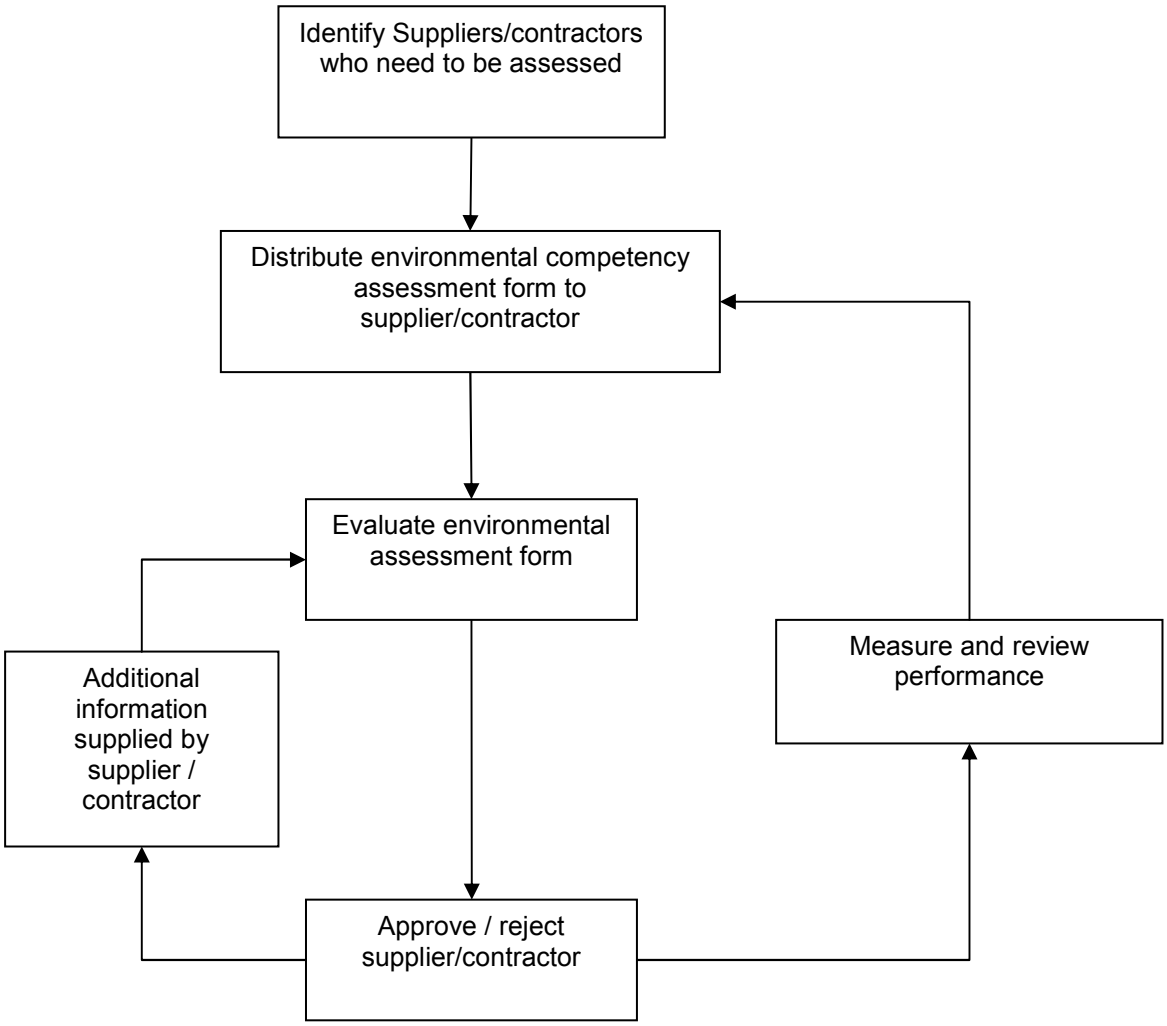
Feedback from training undertaken will be collected and evaluated for effectiveness by **the Admin Staff.**

The Admin Staff shall ensure that where appropriate, the competencies of tendering/appointed contractors/suppliers are assessed to ensure that they have allocated adequate resources to meet their environmental obligations.

Procedure for Competence, Training, and Awareness



Procedure for Assessing the Environmental Competence of Contractors/Suppliers



Training and Competence

INTRODUCTION

Environmental training meets the business need of an organisation and is a critical factor affecting competency and success of certain operations.

Legislative Requirements:

Organisations need to keep up to date with new laws. Training can help an organisation to comply with specific legal requirements.

Market Needs:

Assurances from the organisation to stakeholders to demonstrate they are working towards improving and promoting environmental awareness. Environmental awareness training for staff can increase the organisation's contribution towards environmental issues.

Skills Gap:

New staff, new technologies, new legal obligations or new responsibilities can create periodic skills gaps. Effective training can help to overcome these issues, if they cannot be avoided.

STAFF TRAINING NEEDS

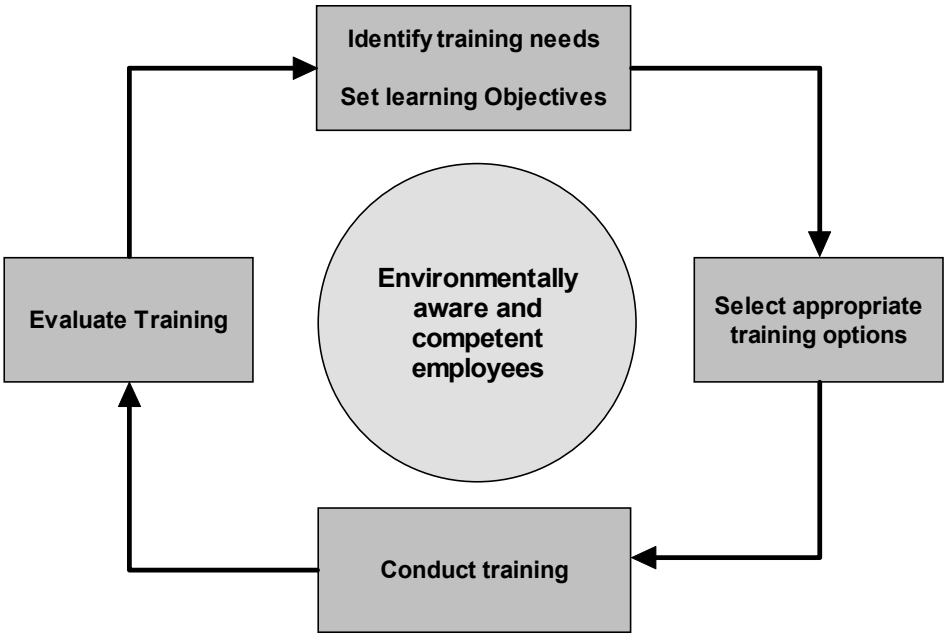
Training for the organisation's staff differs depending on the level of responsibility:

Board Level Managers – should be made aware of the:
- Actual or potential environmental impacts of the organisation;
- Benefits of improving environmental performance;
- Purpose, importance and development of an environmental policy;
- Purpose of, and method for, reviewing the environmental policy and environmental management programme.

Environmental Managers – those responsible for environmental management in an organisation require the most training. They should be trained to:
- identify the relevant legal requirements of the organisation;
- understand the purpose of and methods for conducting an environmental review and assessing the significant environmental aspects;
- develop an environmental program and associated activities that will improve the environmental performance of the organisation;
- audit the environmental programme;
- understand ways to make all staff aware of environmental issues.

General Staff – training activities should make all staff aware of the:
- importance of complying with the environmental policy;
- actual or potential environmental impacts of their work;
- benefits of the organisation's environmental management activities;
- potential consequences of departing from specified operating procedures;
- roles and responsibilities they have in emergency avoidance and response.

The Training Cycle



Feedback and Evaluation

It is important to evaluate the effectiveness of training. At the organisation level, this helps with the development of future training programmes so that successful approaches can be built on and ineffective methods avoided.

Recording Training

All training events should be recorded. This will demonstrate that adequate training has been provided to staff within the organisation. Details to be recorded would include:

- date, course subject and duration;
- course delegates;
- copy of certification issued;
- name of trainer and establishment;
- any further recommendations of additional training requirements.

TRAINING REGISTER FOR EMPLOYEES

Name: **Start date:**

Job title: **Date of birth:**

DATE	TRAINING RECEIVED	TRAINING PROVIDER	RETRAIN DATE

Training Register for Employees

Trading Contractor Safety Information

VETTING ENVIRONMENTAL COMPETENCE

In order to assess whether a contractor has allocated adequate resources to fulfil their environmental obligations in terms of environmental law it will be necessary for the contractor to complete this organisation vetting questionnaire.

The responses obtained from the contractor, and thorough evaluation and rating of this return will also serve to gauge the contractor's commitment to health and safety and adherence to recognised standards of competence.

Each contractor tendering for work with this organisation will be required to complete the vetting questionnaire and a decision will be taken by this organisation's management, based on the evaluation of the questionnaire responses, as to the suitability of the contractor and their proposed works for this organisation.

In order to rate or assess any item it is necessary to have a scoring system. This is an operational system:

Score	Rating	Example
0	Zero	Topic not covered, no action/evidence
1	Very poor	Topic badly covered, no action/evidence
2	Poor	Topic badly covered, some action/evidence
3	Good	Topic covered, some action/evidence
4	Very good	Topic well covered, procedure well followed
5	Excellent	Procedure in place, evidence of compliance

Thus a contractor will develop an average score. A contractor ought to be competent if they can average more than a score of 3. It is borne in mind that the degree of competence necessary for a simple task carried out in a "safe" environment is less than that required for a complex task in a more dangerous workplace.

SUBCONTRACTOR ENVIRONMENTAL QUESTIONNAIRE

Name of organisation:

Address:

Tel: **Fax:**

Email address:

Nature of business:

1. Does your company have an environmental policy? *Provide a copy of the environmental policy if one exists. If part of health & safety policy please state this.*	YES/NO
2. Does your company produce an environmental report? *Some organisations produce environmental reports for external and/or internal stakeholders – if so provide a copy.*	YES/NO
3. Name and position of the person responsible for environmental policy *Person employed by the organisation to ensure that the legal environmental responsibilities of the company and objectives of the environmental policy are met.* Name: Position: Company:	
4. Are you currently operating or planning to implement an environmental management system? *If currently accredited under ISO14001, BS 8555 or EMAS then enclose copy of certificate. If working towards one of these then indicate current status and planned compliance date.*	YES/NO Current status: Planned compliance date:
5. What are the environmental impacts of the goods, works and services you intend to supply? *List the items that are affected by your operations and detail what control measures you have in place to minimise their impact upon the environment.*	

6. Measuring and monitoring systems to assess actual performance against the company's environmental objectives and targets?
   Detail any systems you operate to monitor the impact your operations have upon the environment, and any systems in place to compare the results of the monitoring against company objectives and targets

7. How do you ensure your suppliers have addressed their environmental impacts?
   Provide details of any systems or procedures used to check the environmental controls of your suppliers, such as questionnaires, on-site audits, etc.

8. Have you, or sub-contractors to your company, been served with enforcement notices, civil sanctions or been prosecuted in the past three years for breaches of Environmental Legislation?
   Provide details of any Enforcement Notices issued on any of your operations by the Environment Agency or Local Authority in the last three years. Include details of actions taken to satisfy the requirements of the Notice. Also provide details of any prosecutions taken by the Environment Agency or Local Authority against your organisation including outcome and improvements implemented. This will be confirmed checked

Other Relevant Information

Provide any other details that demonstrate a positive and proactive approach to reducing the company's impact upon the environment.

Name of person completing questionnaire: **Job title:** **Date of completion:**
Required action (for assessor's use only):
Grading:
Evaluated by:
Date:

SECTION E

Arrangements for Managing Environmental Emergencies and Incidents

Roxwell Ltd recognise our duty to develop procedures which details the way in which potential environmental emergencies and incidents are identified and managed and how emergency response procedures will be documented, reviewed, amended and tested.

The Contracts Managers will identify potential environmental emergencies and incidents through Roxwell Ltd's activities and environmental aspects and impacts. Incident specific procedures will be developed, describing the action to be taken in the event of such an emergency / incident with the aim of minimising the environmental consequences.

Stephen Ewin, Stuart Herridge, the Contracts Managers, and the Site Managers will be responsible for assessing if there is adequate incident specific management equipment and training for potential environmental emergencies / incidents. **Stephen Ewin, Stuart Herridge, the Contracts Managers, and the Site Managers** will communicate emergency and incident preparedness response procedures to appropriate staff to a level that they can manage any environmental emergencies / incidents in their area of responsibility.

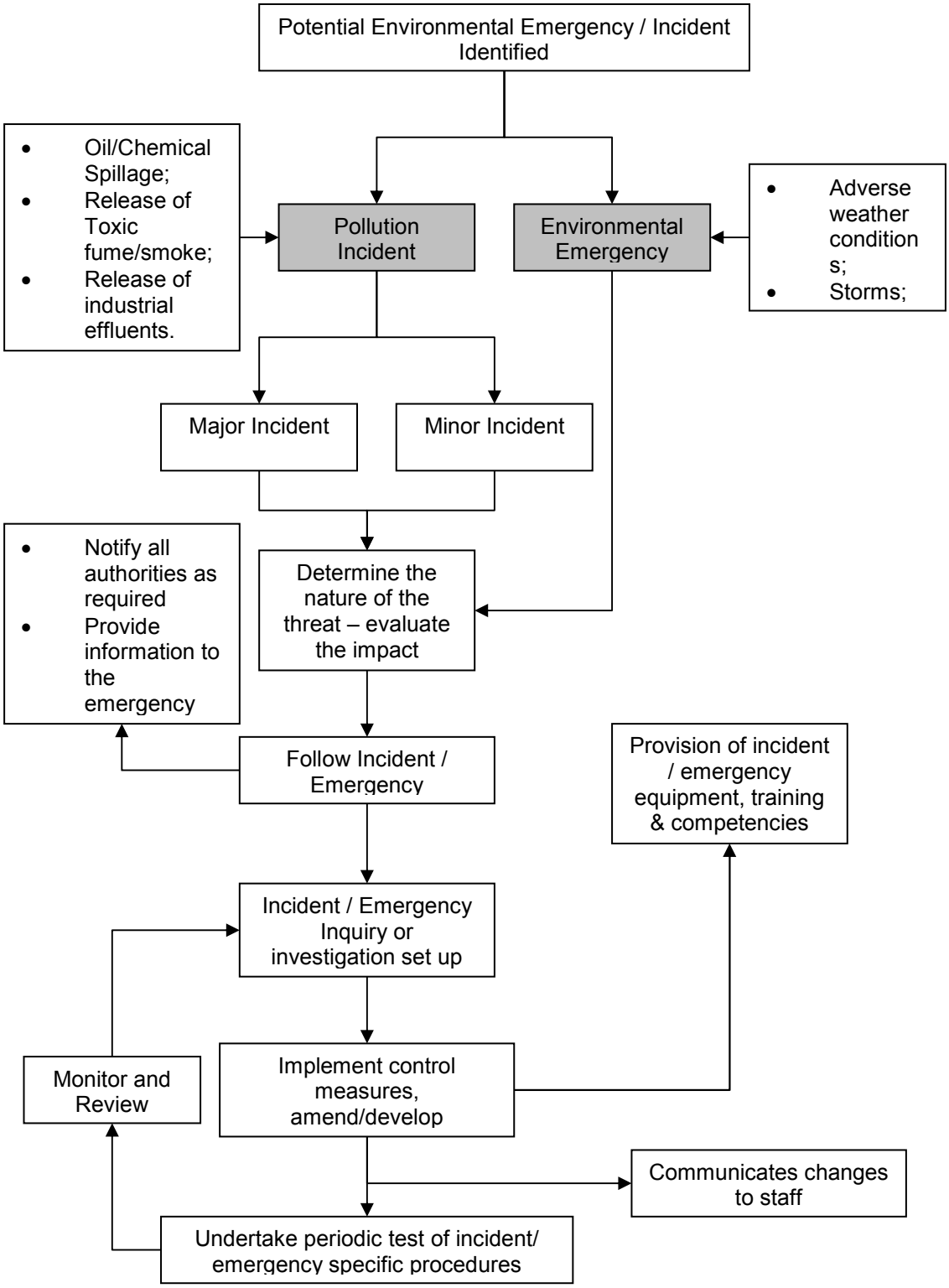
Stephen Ewin, Stuart Herridge, the Contracts Managers, and the Site Managers will review and amend the procedures following, a periodic review, an incident / investigation or testing effectiveness of procedures and emergency preparedness and response.

A register of incidents / emergencies and non-specific procedures will be maintained by **Stephen Ewin, Stuart Herridge, and the Contracts Managers**, detailing the department to which the procedure and incident relates. The details will include a description of (a) how the incident occurred, the date, (b) the extent of the incident, (c) actions taken, (d) any necessary remedial steps, (e) involvement of external organisations, (f) overall environmental damage – costs and complaints, (g) breach of legislation, (h) action to prevent recurrence, and (I) any follow up actions.

After every environmental emergency / incident an investigation will be undertaken by **Stephen Ewin, Stuart Herridge, and the Contracts Managers** forwarding details to senior management.

At the discretion of **Stephen Ewin, Stuart Herridge, and the Contracts Managers** THSP will be appointed to assist with incident investigation.

Procedure for Managing Environmental Emergencies and Incidents



See guidance section for details

Environmental Emergencies and Incidents

INTRODUCTION

The organization is required to identify, document and manage potential environmental emergencies and incidents that potentially may arise from products, processes or services.

Definitions:

An ***environmental emergency*** is defined as an unauthorised/uncontrolled release of a substance or substances in any form (e.g. a gas, a liquid, a solid, a nuisance such as noise, vibration, odour or any combination of these) into the environment (air, land, water) requiring immediate and emergency action to prevent or minimize environmental impact(s) which would be likely to result in one or any combination of the following:

- The calling of any emergency service;
- The notification of the Environmental Agency or Local Authority Environmental Officer and which is likely to result in any form of action by them;
- Legal proceedings against the organisation under environmental legislation;
- Justifiable complaints from local residents and/or environmental groups;
- Significant long/medium-term environmental damage/harm e.g. to humans, flora, fauna water/land contamination, property.

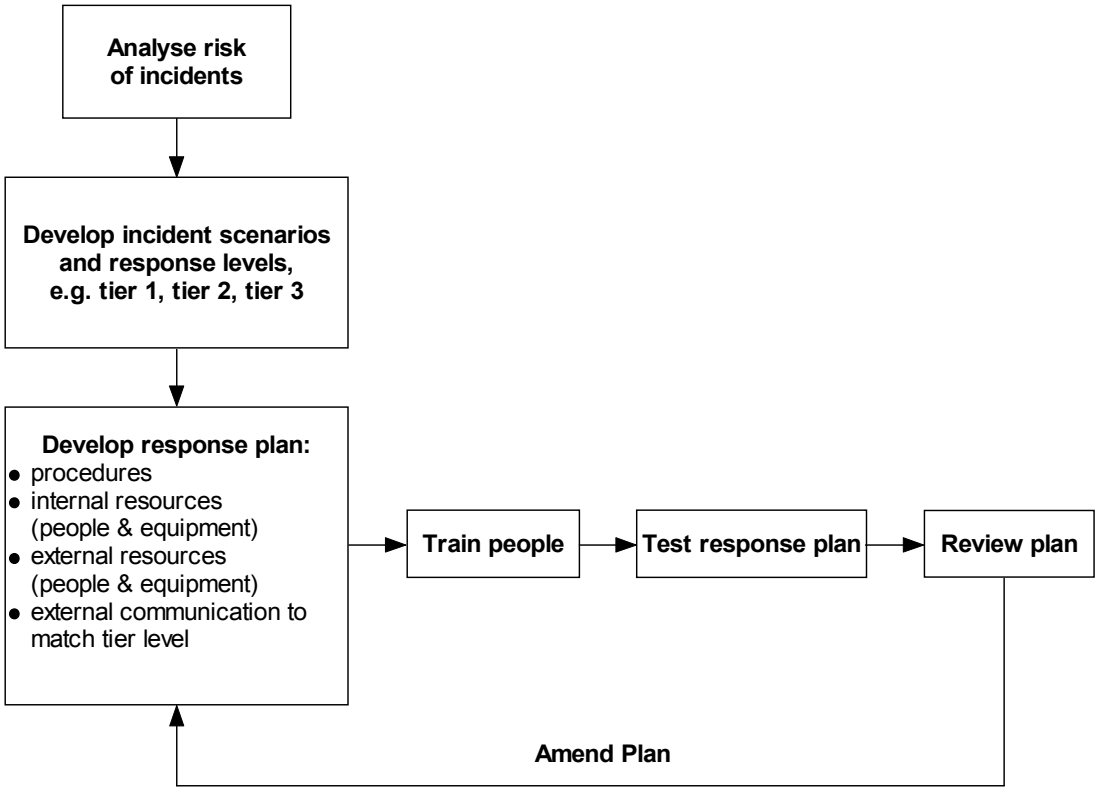
An ***environmental incident*** is defined as an unauthorised/uncontrolled release of a substance or substances in any form (e.g. a gas, a liquid, a solid, a nuisance such as noise, vibration, odour or any combination of these) into the environment (air, land, water) requiring action to prevent or minimize environmental impact(s) which would be likely to result in one or any combination of the following:

- The calling of any emergency service;
- The notification of the Environmental Agency or Local Authority Environmental Officer;
- A breach of environmental legislation;
- Complaints from local residents and/or environmental groups;
- Identifiable environmental damage/harm e.g. to humans, flora, fauna water/land contamination, property.

Environmental Emergency Preparedness and Response

An emergency incident can lead to an immediate environmental impact, or an increased risk of an impact – dependant upon the type of incident and the severity.

When an environmental emergency or incident occurs, rapid and correct decisions have to be made to minimize the impact. Therefore the organization must consider, through environmental management, its processes, consider what emergencies / incidents could happen and what contingency measures should be in place if emergencies / incidents occur to ensure that serious impacts are either avoided or minimized (mitigated)



Main stages in developing effective contingency plans

Identify Potential Incidents (Risk Assessment Process)

Typical incidents that could cause an emergency are spills, leaks, accidental releases, fire or explosion. The identification of potential incidents is determined by assessing what could go wrong (related to the hazard) and the likelihood of the event and its consequence (the risk) – the same principle for determining hazards and risks used in health and safety.

To establish what could go wrong both intrinsic hazards of substances, and hazardous situations must be identified. Particular attention should be given to the storage, handling, processing or treatment of hazardous substances, for example toxic and flammable substances.

Hazardous substances can be both inputs (materials and fuel) and outputs (wastes and pollutants). Consideration to the causes of incidents is an integral part of the assessment of hazardous situations. Typical causes include:

- Corroded pipework;
- Rupture of pipework (from puncture or impact);
- Faulty couplings when transferring chemicals;
- Equipment failure;
- Operator error or misuse;
- Vandalism.
- Human error or accidents

An analysis of previous incident statistics, including near misses, can provide valuable information when assessing causes.

The risk assessment process evaluates the risk of incidents (significant impacts) and ensures control measures are implemented. This provides a firm foundation for establishing emergency response procedures.

Example Risk Management verses Emergency Response (refuelling oil spill)

Risk Management	Emergency Response
• Self sealing couplings in case of unplanned disconnection	• Spill response kit to soak up spills
• Regular inspections of equipment	• Drain protectors (prevents fuel entering drains)
• Warning alarms	• Access to emergency services to intercept drains
• Oil water interceptors	• Access to agencies to rescue wildlife
	• Oil waste & debris storage and disposal facilities.

The Tiered Response Concept

Contingency plans could be based / developed on a 'tiered response'. Tiered response recognises incidents can have various consequences, and subsequently different response requirements. Three tiers are often effective for identifying / planning response:

Tier level	Description	Typical Consequence category	Example
Tier 1	Incident can be managed by staff, using available resources. No immediate threat to the environment. Incident easily contained.	Minor	Small oil spill – does not reach drains and can be cleaned up by oil spill kit.
Tier 2	Incident requires support from a response team and resources across the site. Emergency services may be alerted and environmental regulators notified – risk of environmental impact. Detailed post incident investigation report necessary.	Moderate risk / approaching serious.	Ongoing leak of oil – threatening to breach secondary containment into localized drain.
Tier 3	Incident requires external support from emergency services and / or technical specialists. The environmental regulators must be notified since the law has been breached. Public safety may also be a risk. Detailed internal post incident investigation will be necessary and possible regulatory investigation depending on severity.	Serious or major	Large oil spill reaches river, and is carried down stream putting amenity and ecological resources at risk.

Emergency Response Plan

The organisation should develop a plan to handle foreseeable emergency situations. The aim of the plan is to minimize the impact of incidents and reduce the risk of their escalation through rapid and effective response mechanisms.

The contingency plan should:

- Outline the steps to be taken in the event of key incidents based on tiered response, including personal protection for those involved in the response;
- Allocate roles and responsibilities;
- Ensure response can occur at any time – out of hours capability;
- Contain up to date details for key members of staff, external organisations – including the emergency services, technical specialists, regulatory authorities;
- Include emergency call out procedures;
- Contain copies of forms for notifying authorities of incident and actions being taken;
- Include isolation, and restart procedures / checklists.

Training, Testing, and Review

Training is essential to ensure that those employees involved in the response to an environmental emergency fully understand what steps to take, where equipment is located, how to use it and who to contact.

Regular practice drills should be conducted to consolidate training and to test the effectiveness of the response plan. Ideally drills should simulate a serious incident and involve external organisations such as the emergency services and regulatory authorities.

The plan should be reviewed and amended as required following a drill or an actual emergency. The plan should also be reviewed periodically to ensure it reflects current site activities, facilities and personnel or recommendations from enforcing authorities or emergency services. Changes or amendments must be communicated to the relevant personnel.

ENVIRONMENTAL INCIDENT REPORT FORM

Incident Reference Number:	

Full name of person completing this report:	

Date investigation requested:		Date and time investigation commenced:	

Location where the investigation is being carried out (Site or Dept):

Name and Job title of person supplying information:	

THE INCIDENT

What is the exact location of the incident:	

Date and time of incident:	

Details of the incident – explain what happened (how and why) and any environmental impacts. Include any facts necessary to clarify what happened, e.g. equipment / materials used, weather conditions etc.

Did the incident breach any known statutory / regulatory condition?	YES / NO (Delete as required), If Yes provide details

Identify the cause / reasons for the incident:

Immediate action taken:

Recommended further corrective / preventative actions required to prevent recurrence *(consider employee training, improved controls, plant & equipment)*:

Identify who is responsible to take action and by when:

Date and time investigation completed:	

Signature of Investigator: _____

IT IS IMPORTANT THAT THIS FORM IS SENT TO THE DIRECTOR RESPONSIBLE FOR ENVIRONMENTAL MANAGEMENT

SECTION F

Arrangements for Waste Disposal

All waste generated during the course of this organisation's activities shall be deemed "controlled waste" and disposed of in a responsible manner in accordance with our duty of care under the Environmental Protection Act.

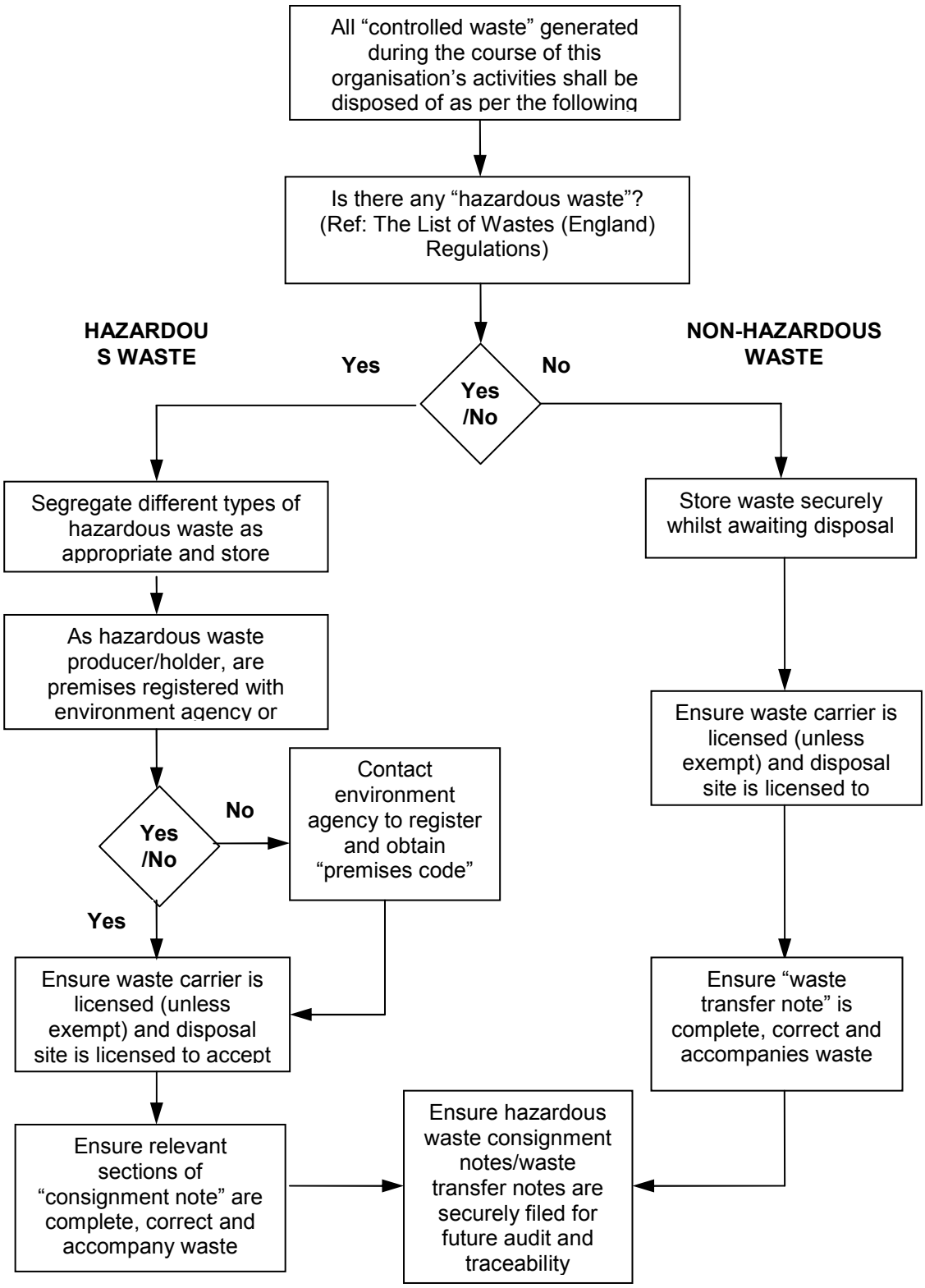
The Contracts Managers and the Site Managers shall ensure that all waste materials are stored and disposed of in accordance with organisation procedures and relevant legislation.

The Contracts Managers shall ensure that disposal of all "non-hazardous waste" is accompanied by and recorded through a system of signed "waste transfer notes".

The Contracts Managers shall ensure that disposal of all "hazardous waste" is accompanied and recorded through a system of signed "hazardous waste consignment notes". They must also ensure that they use an authorised business as regulated by the Environment Agency.

The Admin Staff and the Site Managers shall ensure that all Consignment and waste transfer notes are kept on file.

Procedure for Waste Disposal



Waste Disposal

WASTE MANAGEMENT DUTY OF CARE

The duty of care applies to “controlled waste”. Waste is defined as "any substance or object which the producer or the person in possession of it discards or intends or is required to discard". Additionally, the duty of care applies to anyone who is the holder or carrier of such waste. The only exception to this is for occupiers of domestic property for the household waste generated from their home.

“Controlled waste” means waste from households, commerce or industry. A further subdivision can be made into “hazardous” and “non-hazardous” wastes depending on the effect of these wastes on health and the environment.

"Producer" means anyone whose activities produce waste or who carries out pre-processing, mixing or other operations resulting in a change in its nature or composition.

“Holder" means anyone who imports, produces, carries, keeps, treats or disposes of controlled waste or, as a broker, has control of it.

The Environmental Protection (Duty of Care) Regulations, the Controlled Waste Regulations and the Hazardous Waste Regulations place legal responsibilities on waste producers and holders to ensure that the disposal of all controlled waste is safely managed and that records are kept for audit by the relevant authorities.

AUTHORITIES AND ADVISORY BODIES

The following authorities and advisory bodies should be consulted where appropriate:

- The Environment Agency (EA).
- The Scottish Environment Protection Agency (SEPA).
- The Health and Safety Executive (HSE).
- The Local Authority Environmental Health Department.
- The Local Authority Waste Disposal Department.

PREMISES NOTIFICATION

Where more than 500kg of hazardous waste is produced at, or removed from, premises during any 12-month period there is a requirement to notify the premises to the EA or SEPA.

It must be noted that exemption from notification does not exempt the producer from any other aspect of the Hazardous Waste Regulations, e.g. an office disposing of small quantities of spent fluorescent light tubes (i.e. less than 500kg) must still prepare hazardous waste consignment notes.

DISPOSAL CONTROLS

All waste processes must be regularly monitored. This should include weekly (or daily) checks on all waste collection areas, checks on the correct segregation of waste and checks on the contractors who remove the waste.

Appropriate documentation must be completed to provide an auditable trail for the waste.

Carriers must be registered in order to collect waste, and the disposal and recovery facilities must be licensed to take the waste.

It must be remembered that the duty of care for waste continues all the way down the line to the point of final disposal. Thus, if an incompetent contractor allows waste to escape after collection then the responsibility may rest with the producer of the waste. It is therefore crucial that organisations select registered waste carriers and legitimate waste disposal sites as regulated by the Environment Agency/SEPA.

In summary, the following actions must be carried out:

- Notify the premises (unless exempt) to the EA or SEPA where hazardous waste is produced;
- Appoint a competent waste carrier, ensuring that they are registered and hold an appropriate license (this can be checked through the EA's website);
- Ensure that appropriate documentation is completed and accompanies waste:
  - Waste transfer notes for non-hazardous waste (see example form below);
  - Hazardous waste consignment notes for hazardous waste (multi-part forms are available from the EA or SEPA);
- Ensure documents are securely filed (waste transfer notes must be kept for a minimum of 2 years and hazardous waste consignment notes for a minimum of 3 years);
- Ensure that the final disposal site is registered and has a license to accept specific types of waste.

It is strongly recommended that you also:

- Get references from other clients before you appoint a waste sub-contractor. It may also be appropriate to audit the contractor on issues such as staff training, equipment and vehicles, any previous convictions for waste offences, and policies and procedures;
- Visit the disposal or recovery facilities that finally deal with the waste. It may be appropriate to audit the facility to ensure compliance with your duty of care and legal obligations.

(NON-HAZARDOUS) WASTE TRANSFER NOTE

A. DESCRIPTION OF WASTE

1. Description of the waste being transferred:

2. European Waste Catalogue Code:

3. How is the waste contained?

Loose ☐ Sacks ☐ Skip ☐ Drum ☐ Other ☐ please describe

4. What is the quantity of waste? (number of drums, tonnes etc.):

B. CURRENT HOLDER OF THE WASTE (TRANSFEROR)

Full name:
Name and address of the Organisation:

Which of the following are you? (one or more boxes may apply)

Waste producer	□	Holder of waste management licence	□	Licence no: Issued by:
Waste importer	□	Exempt from waste management licensing	□	Reason why:
Waste collection authority	□	Registered waste carrier	□	Registration no: Issued by:
Waste disposal authority (Scotland only)	□	Exempt from requirement to register	□	Reason why:

By signing Part D below, I confirm that I have fulfilled my duty to apply the 'waste hierarchy',

as required by Regulation 12 of the Waste (England) Regulations 2011. YES ☐

C. PERSON COLLECTING THE WASTE (TRANSFEREE)

Full name:
Name and address of the Organisation:

Which of the following are you? (one or more boxes may apply)

Waste collection authority	□	Authorised for transport purposes	□	Specify purpose:
Waste disposal authority (Scotland)	□	Holder of waste management licence	□	Licence no: Issued by:
		Exempt from waste management licensing	□	Reason why:
		Registered waste carrier	□	Registration no: Issued by:
		Exempt from requirement to register	□	Reason why:

D. ADDRESS OF PLACE OF TRANSFER:

Date of Transfer:		Time of transfer (for multiple loads give between dates):

Name and address of broker (if applicable):

TRANSFEROR		TRANSFEREE
Signature:		
Full name: Representing:		

SECTION G

Arrangements for Environmental Monitoring, Audit and Inspection

Progressive environmental improvements can only be achieved through the constant development of policy, approaches to implementation and techniques of risk control.

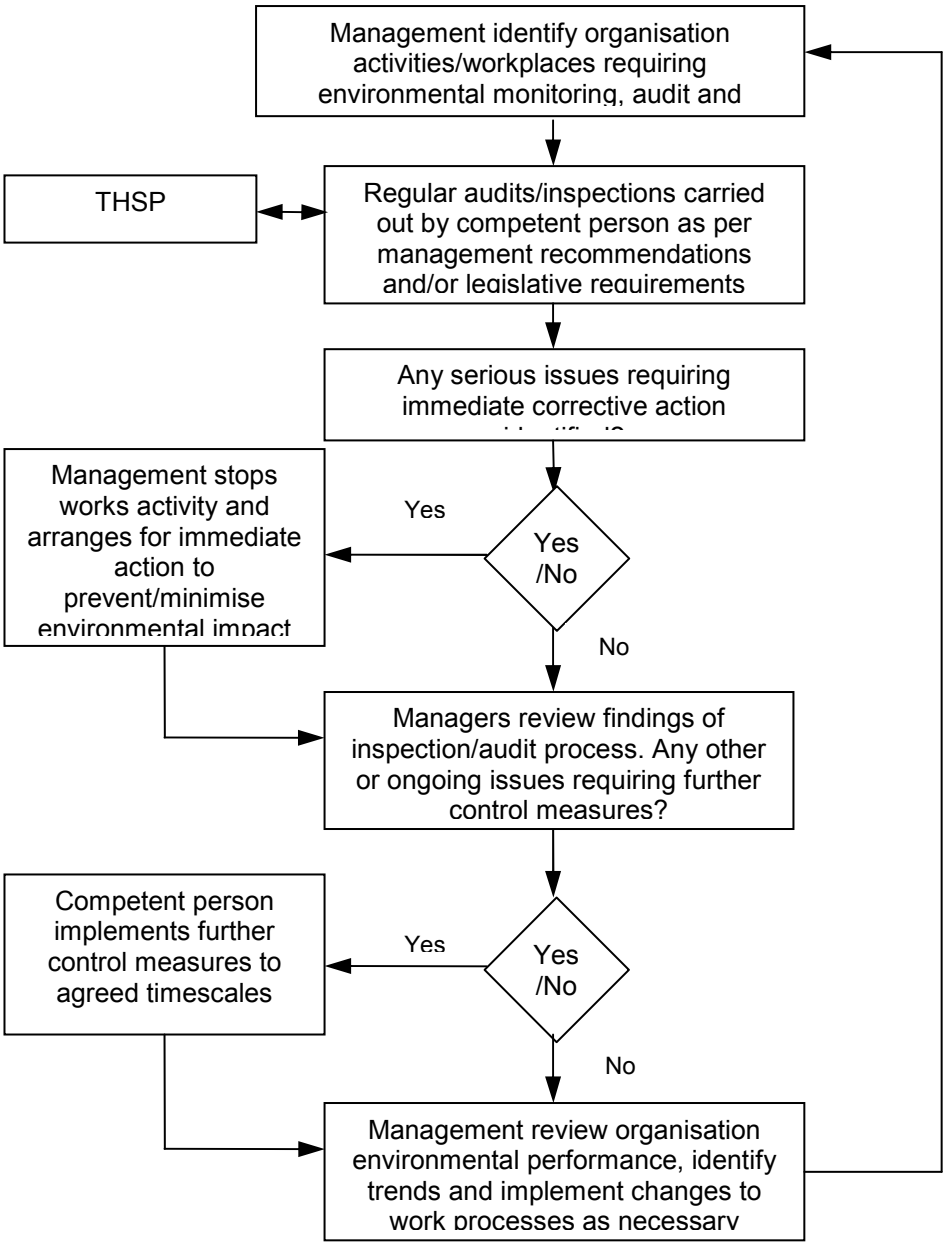
The Site Managers will ensure that a systematic audit of all environmental arrangements will be carried out on a regular basis.

The Admin Staff will ensure that places of work are inspected regularly and in accordance with statutory requirements.

Where requested, Roxwell Ltd's environmental advisors, THSP, will visit the workplace to carry out environmental inspections and audits.

Records of environmental inspections and audits will be kept in order that the senior management of Roxwell Ltd can monitor the performance of the organisation and improve the overall environmental culture within the workforce.

Procedure for Environmental Monitoring, Audit and Inspection



Environmental Monitoring, Audit and Inspection

INTRODUCTION

Workplace monitoring, and environmental performance checks are key management responsibilities for ensuring acceptable environmental practices are maintained. The focus should be on environmental impacts and the way these can be minimised. Regular workplace audits, inspections and management reviews go some way to help ensure those standards are maintained.

MONITORING

Organisations should develop a strategy to be able to continually monitor their environmental performance. They should consider the following stages:

- Data collection methods;
- Identification of stakeholders;
- The scope of monitoring;
- The aims and goals;
- Organisation priorities;
- Develop an action plan;
- Implement the action plan;
- Monitor and review;
- Report.

AUDITS

An audit is a systematic, documented, periodic and objective review by either internal or external competent persons and would cover operations and practices to check compliance with the organisation's management procedures and legislation.

The overall aim of the audit would be to gather information to provide ongoing updates to enable further environmental improvements within the organisation.

The Key objectives of an environmental audit should cover the following:

- Verify compliance – organisation procedures and legal
- Review implementation of policies
- Identify Liabilities
- Review Management Systems / procedures
- Identify needs, strengths and weaknesses
- Assess environmental performance
- Promote environmental awareness – Inductions / training

There are different types of audits the organisation could conduct; these will be determined by the organisation's activities. The following are the list of audits which could be conducted:

- Compliance audit - This would check legal compliance;
- Site Audits - Examines site or multi site operations;
- Suppliers(i.e. Waste) - Review of practices, permits to check Conformity;
- Programme audit Review of progress and Achievements, (e.g. Waste Minimisation);
- Single issue audit - e.g. Noise, emissions, waste, Energy use;

- Activity audit - Examine a particular activity;
- Procedures audit - Looks at agreed procedures;
- EIA audit- - An Environmental Impact Assessment would be carried out as a specialist audit for Town & Country Planning purposes.

WORKPLACE INSPECTIONS

Inspections should only be carried out by a competent person, such as the organisation environmental manager or an external environmental advisor. Any issue posing a significant risk to the environment requires immediate management action and should, where possible, be rectified there and then. All issues are to be recorded and reasonable timescales specified for rectifying/addressing any outstanding issues.

Where required, a formal report shall be completed before the end of the working period with a copy issued to the person for whom the inspection was carried out. The environmental manager or appointed person shall regularly check that any outstanding issues have been suitably addressed and rectified.

DEFRA have identified 22 Key Performance Indicators (KPI) which could be used when carrying out environmental inspections and would cover emissions to the Air, Water and Land and subsequently lead to pollution if not controlled:

Emissions to the Air

- Greenhouse gases;
- Acid Rain and Eutrophication - (nutrients from pesticides);
- Dust and Particles;
- Ozone depleting substances - (Air conditioning units and refrigeration);
- Volatile Organic Compounds;
- Metal emissions to the air.

Emissions to Water

- Nutrients and Organic Pollutants;
- Metal emissions.

Emissions to Land

- Pesticides and Fertilisers;
- Metal Emissions;
- Acids and Organic Pollutants;
- Waste (Landfill, Incinerated and Recycled);
- Radioactive waste;
- Carbon Emissions.

Resource Use

- Water use and abstraction;
- Natural Gas;
- Oil;
- Metals;
- Coal;
- Minerals;
- Aggregates;
- Forestry / Agriculture.

WORKPLACE ENVIRONMENTAL INSPECTION CHECK SHEET

Location: **Date:** **Carried out by:**

	Satisfactory - ☑ Unsatisfactory -☒ Not Applicable – n/a	Action Date
SAFETY MANAGEMENT		
Documentation		
Policy available to employees?		
Registers being completed?		
Aspect / Impact Registers		
Waste Management Licence?		
Waste Carriers Licences?		
PPC Permit?		
Trade Effluent Consent?		
Trade Effluent agreement?		
Waste Transfer Notes		
Consignment notes		
Training		
Training for managers		
Training for employees		
Training of Sub Contractors		
Induction Training		
Waste		
Control of waste (Storage)		
Control of Waste (Transporting)		
Waste Segregation		
Control of Hazardous Waste		
Control of specialist waste		
Waste Minimising procedures		
Disposal of Trade effluent?		
Waste recycled, reused?		
Targets set to reduce Waste		
SWMP		
Emissions (KPI's)		
Control of Dust		
Control of Fumes		
Control of Vapours		
Control of Gases		
Control of Grit		
Control of Particles (PM10)		
Control of Smoke		
Control of Dust		

	Satisfactory - ☑ Unsatisfactory -☒ Not Applicable – n/a	Action Date
Products / Materials		
COSHH Assessments in place		
MSDS in place		
Storage in line with MSDS		
Quantity's held to a minimum		
Sourced from renewable resources		
Sourced from local suppliers		
Other materials stored correctly		
Emergency Procedures		
Emergency procedures in place		
Emergency procedures tested		
Emergency response plan in place		
Emergency response team in place		
Activities		
Correct bunding in place		
Spill kits in place		
Drainage plan in place		
Plant / Equipment maintained		
Inspections carried out		
Trip Trays in place / Condition		
Procedures in place to reduce Noise		
Procedures in place to reduce Vibration		
Energy minimisation		
CO2 emission reductions		
Nuisance		
Control of Noise		
Control of Odours		
Control of Vibration		
Control of Visual Amenity		
Control of Lighting		

Workplace Environmental Inspection Check Sheet