ENVIRONMENTAL

POLICY & PROCEDURES MANUAL

CLIVE GRAHAM ASSOCIATES

NOVEMBER 2019

ENVIRONMENTAL
POLICY & PROCEDURES MANUAL

RECORD OF AMENDMENTS

Date	Issue	Amended By	Comments/Details
22/01/13	2	Darby Allan	Review and update
27/08/13	3	Darby Allan	Update for legislative changes
20/08/14	4	Darby Allan	Update and checks added efficiency section
June 2015	5	RW	Policy Issued.
August 2016	6	Mark Light	Reviewed/changes made, including legislation/controls/forms
June 2017	7	RW	Policy reviewed & Re Issued
September 2018	8	AH	Policy reviewed & re issued
November 2019	9	AH	Policy reviewed & reissued
May 2020	10	MC	Company rebranded – policy updated

CONTENTS

Contents

Section One – Policy and Organisation

Section Two – Environmental Management Procedures

Section Three – Miscellaneous Forms

Glossary of Key Environmental Terms

Section One

Policy & Organisation

1.0 Statement of Policy

CLIVE GRAHAMS ASSOCIATES LTD

ENVIRONMENTAL POLICY STATEMENT

Clive Grahams Associates Ltd is a professional and environmentally conscious organisation, which acknowledges the impact that our operations may potentially have on the environment. The clear objective of Clive Grahams Associates Ltd is to minimise any impact on the environment by:

- As a minimum meeting all Environmental legislative requirements.
- Preventing pollution, reducing waste and ensuring wherever practical measures are implemented to protect and preserve natural habitats, flora and fauna;
- Considering the effects that our operations may have on the local community;
- Taking action to eliminate or reduce as far as practicable, any potentially adverse environmental impacts;
- Promote environmental awareness amongst our staff, suppliers, contractors and partners by implementation of operational procedures;
- Seek to work in partnership with the community by behaving in a considerate and socially responsible manner;
- Ensure effective and expedient incident control, investigation and reporting
- Reviewing our environmental performance regularly so that we achieve continual improvement

Management and supervisory staff have responsibilities for the implementation of the policy and must ensure that environmental issues are given adequate consideration in the planning and day-to-day supervision of all work.

Clive Grahams Associates Ltd will fully comply with the duties placed upon it within the requirements of Statutory Legislation, whilst at all times complying with, as a matter of best practice, the requirements and duties set out within Approved Guidance as issued by the Environment Agency and other organisations.

All employees and sub-contractors are expected to co-operate and assist in the implementation of this policy, whilst ensuring that their own works, so far as is reasonably practicable, are carried out without risk to themselves, others or the environment. This includes co-operating with management on any environment related matter.

Clive Grahams Associates Ltd will take all practical steps to ensure that potential hazards and risks to the environment are identified and that suitable and effective preventative and control measures are implemented. All employees will be provided with the necessary resources, equipment, information, instruction and training to fulfill the requirements of this policy.

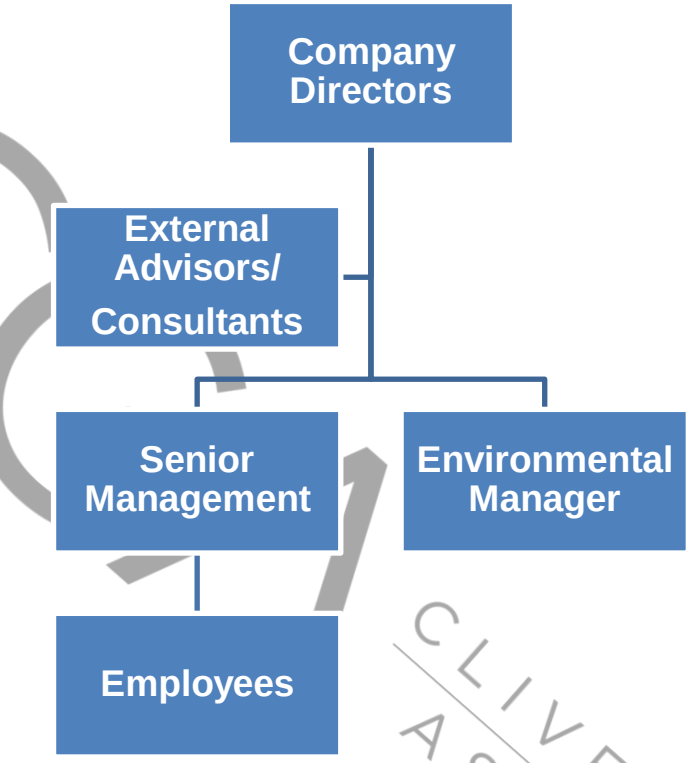
The Directors have overall responsibility for all Environmental matters. The operation of this policy and the associated procedures will be monitored and reviewed on a regular basis to ensure that they remain current and applicable to the company's activities. This policy has been endorsed by the Board of Directors who give their full support to the implementation of the policy.

Signed: Date: 13 May 2020

Director

2.0 Organisation

The following organisation chart outlines the structure for the management of Environmental issues within Clive Grahams Associates Ltd.



The effectiveness of the management of environmental issues is dependent on the persons who are responsible for ensuring that all aspects of work are carried out with due consideration for the environment.

Ultimate responsibility lies with the Directors, but specific duties are delegated to others according to their experience and training.

Company Directors and senior management, both individually and collectively, will ensure that this policy is applied throughout the company and that those employed by the company are kept fully informed of its content.

Managers will ensure that this policy is adopted by all employees, sub-contractors, suppliers and visitors. Furthermore every individual person has a duty of care.

The Clive Grahams Associates Ltd nominated person for Environmental management is Bill Osborne.

To assist the company in fulfilling its duties and obligations, an external advisor/consultant may be appointed to provide advice and assistance to the management and employees of Clive Grahams Associates Ltd. Their contact details will be clearly displayed on the company notice board.

3.0 Implementation of The Policy

Whilst overall responsibility for the implementation of this Policy is vested with the Company Directors, responsibility for the day to day application of the policy is delegated to the Director Responsible for Environmental Management.

To clarify the roles and responsibilities, the following duties have been allocated to nominated employees:

- Induction Training - Line Manager
- Environmental Impact/Risk Assessments -
- Workplace Environmental Audits -
- Waste Management -
- Noise Assessments -
- Air Emissions (Smoke, fumes, dust etc.) -
- Fuel and oil storage - Line/Site Manager
- Energy efficiency

-

The above named individuals will be responsible for ensuring that adequate consideration is given to each of the various issues, however, in many instances, specialist advice and support will be required to enable these individuals to ensure that a suitable and sufficient assessment of the issues has been undertaken.

All individuals are however expected to:

- take reasonable care for the protection of the environment through their own acts or omissions
- co-operate with others in the discharge of their duties
- work in accordance with all environmental procedures

At the planning stage, full account is to be taken of those factors that help to eliminate potentially harmful emissions/discharges, waste or other forms of pollution such as noise. Decisions about other priorities (e.g. programme and profit) are to take proper account of the environmental constraints that may be present.

Specific and precise arrangements will be developed and implemented, as needed, to enable the Policy and Procedures to be implemented. Safe systems of work, incorporating, where applicable, environmental reviews and risk assessments, are to be established, implemented and monitored to ensure the appropriate environmental standards are maintained at all times.

High standards will be applied when complying with legislation regarding the protection of the environment.

High standards of cleanliness, hygiene and housekeeping will be maintained at all times, while safe, adequate and clear means of access and egress to places of work will be provided and maintained.

All members of staff will be provided with appropriate and suitable personnel protective clothing and equipment, appropriate to the work which is to be undertaken. Full training and instruction in the use, maintenance and storage of such equipment will be provided to all members of staff.

All incidents, no matter how minor will be reported and recorded in the company's environmental incident log. Significant incidents will be promptly investigated to ensure that the appropriate preventative measures are implemented to prevent a recurrence as appropriate.

All such incidents should be reported to:

- **Environmental Manager**

Environmental training programmes will be promoted with the object of achieving personal awareness of the risks and hazards to the environment, associated with the works Clive Grahams Associates Ltd undertakes.

Responsibility and accountability in relation to the prevention of pollution, reduction of waste and protection of the environment will be specified clearly and in writing to all employees.

Arrangements for the implementation of this Policy are the responsibility of the company's Directors.

The Policy will be explained to all new staff as part of their induction training, before they start work, and a copy of the policy will be made available for reference by any member of staff.

An annual review of the Environmental Policy and Procedures Manual will be carried out to ensure that the procedures and controls remain valid and relevant to our work activities. Further reviews may be carried out as and when required. All updates and amendments to the documentation will be circulated to all Company Personnel.

One of the basic requirements of any environmental policy is to aim for continual improvement. This can only be done with everyone's cooperation and input. All suggestion for improvement are welcome as well as observations or poor practice by ourselves or sub-contractors.

4.0 Environmental Management Responsibilities

4.1 Company Directors

All Directors will ensure that:

- The Company Environmental Policy is issued to all employees and that the written arrangements made to implement the policies are available to all employees
- All employees are made aware of their personal responsibilities
- Appropriate training, resources and support are available to all staff
- Environmental issues are given appropriate consideration
- They regularly liaise with the Environmental Manager
- Risks to the Company relating to potential or actual incidents, environmental impacts, loss or damage to Company Property, and risks to Public health or the environment through Company activities are properly evaluated
- Liability is covered by insurance and advice given to the extent to which risks are acceptable, whether insured or not
- Environmental performance is recorded and reviewed periodically so as to advise when action is necessary to correct adverse trends

It is the responsibility of the directors to ensure the allocation of adequate finances and other resources for the effective implementation of the Environmental Management System. Key topics requiring specific resource allocation are: Management Representation; Pollution prevention equipment; Training; Emergency response equipment; Monitoring and measuring equipment, and Record-keeping systems.

4.2 Environmental Manager

The Environmental Manager is responsible for overseeing the management of environmental issues within the company, as follows:

- Report to the directors and keep them appraised on all matters regarding environmental management
- State the Company's Policies in writing with regard to environmental management, and ensure it is brought to the attention of all employees
- Ensure that arrangements are made for implementing the Company's Environmental Policy
- Ensure that environmental management data is collected, reviewed and reported on
- Ensure that the Company Procedures, Instructions and Guidance are regularly reviewed and amended as necessary
- Provide environmental advice to managers, employees and Customers, using, as necessary, specialist external advisors/consultants
- Promote positive environmental values and continual improvement measures throughout the Company

- Communicate effectively with external organisations such as the Environment Agency regarding the policy and its implementation
- Investigate environmental incidents and record all findings and make recommendations for the prevention of similar incidents
- Liaise with Procurement and Project Managers on contract standards and any future changes or additions required to the policy
- Monitor the effectiveness of the procedures by workplace inspections and audits and report on any improvements that may be required

4.3 Senior Management

Directors and Managers are at all times, responsible for implementation of the Company's Environmental Policy. All members of the senior management team shall:

- Understand the Company's Environmental Policy
- Set a personal example
- Identify and organise appropriate training for their staff
- Liaise with the company's Environmental Manager
- Actively promote a positive environmental culture throughout their areas of responsibility
- Ensure the Policy is implemented properly and that any delegated duties are correctly performed
- Ensure that all agreed actions are implemented as soon as practicable
- Suspend any activity, work or other activity which is considered to constitute an immediate danger to the environment. The circumstances should then be fully investigated and no work shall be allowed to continue until the appropriate remedial actions have been implemented.
- Ensure that regular Environmental inspections are carried out and that environmental issues are actively managed and controlled
- Ensure that the overall environmental performance of Clive Grahams Associates Ltd sites is discussed at regular intervals with all contractors, including sub-contractors
- Report any problems or improvements to this policy to the appropriate director
- Actively promote, at all levels, the Company's commitment to effective environmental management

4.4 All Employees

All employees are required to:

- Understand the Company's Environmental Policy
- Co-operate with the Company in complying with duties and requirements imposed by relevant statutory provisions and Company Procedures
- Co-operate with the Company in complying with Environmental Management duties and requirements imposed by Management
- Not interfere with, or misuse anything provided in the interests of environmental protection
- Use all environmental controls according to the training and information given.
- Report all environmental incidents to your Manager
- Wherever possible minimise waste; energy consumption and environmental impacts.
- At all times ensure that their activities do not give rise to pollution to air, land or water.
- Suggest improvements to environmental performance

Section Two

Environmental Management Procedures

1.0 Environmental Procedures

This section details the arrangements and procedures that we will use to help implement our Environmental Management Policy and ensure compliance with current Environmental Legislation

Within the procedures, reference is made to the 'Environmental Management Plan'. This is a specific document which should be prepared for all existing businesses. For new projects a 'Project Environmental Management Plan' should be prepared and it should detail the project specific arrangements and constraints for the management of all environmental issues on the site.

2.0 Air Pollution

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards to air pollution for inclusion in an Environmental Management Plan.

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Nominated Manager

- Overall responsibility for air pollution control on site
- Develop section of the Environmental Management Plan to include air pollution control
- Identify all potential sources of air pollution and implement suitable controls
- Ensure all sub-contractors and suppliers abide by air pollution control guidelines
- Liaise with the Environmental Manager for all air pollution control issues

Environmental Manager

- Assist Managers in the development of the Environmental Management Plan regarding the control of air pollution
- Ensure all staff comply with the air pollution control procedures

PROCEDURES

Operational Control Guidelines

1. Any requirements for air quality monitoring must be identified prior to any discharges

2. All activities which may cause air pollution should be highlighted and specific risk assessments and safe systems of works should be prepared.

3. Any significant planned air pollution may be subject to local by laws or to local air quality plans. Prior to undertaking any significant activity the Environmental Manager should be consulted.

4. All operations are to be carefully planned and managed to ensure that impacts are kept to a minimum.

5. Ensure that waste burning/bonfires or any other illegal activity is not conducted on site.

6. Be aware of any nuisance activities which may generate odour, vapour or dust and implement controls immediately. Be aware of the effect of weather on activities such as drying out to create dust and wind direction that can affect the local public and neighbours.

7. All plant and equipment will be chosen and serviced regularly to minimise emissions.

8. Where air monitoring is carried out, all records will be retained for a minimum period of 12 years.

9. All permanent and temporary employees, including sub-contractors and suppliers, will be made aware of their responsibilities to ensure that no air pollution incidents occur.

10. In the event of an air pollution incident, the Emergency Control Procedures outlined below will be followed.

Emergency Control Procedures

1. In the event that excessive dust is arising from operations on site due to plant or traffic movements, then damping down of the roads and surrounding area shall be used to control the dust. Road sweepers shall also be used to keep roads clean and tidy where appropriate

2. If the problem persists it may be necessary to install wheel-washing systems.

3. Where dust is arising from excavations, water shall be applied across the working area.

4. Where dust is arising from stockpiles of materials, water shall be applied to the stockpile, or the stockpiles should be sheeted.

5. Care shall be taken in both instances where water is being applied to the soil to prevent excessive run-off causing a further pollution incident, or a safety hazard due to the weakening of the ground.

6. If any item of plant is releasing excessive emissions through its exhaust, it should be turned off, returned to the hire firm and replaced with better quality plant.

7. Where emissions are becoming a problem during cutting the method of working will be changed to use damping or extractive techniques.

8. Should any excessive odours arise from storage areas including fuel, chemicals and waste the cause should be investigated and changes made to storage arrangements.

9. Waste must be regularly collected and removed from site to prevent odour emissions.

10. In the event that a serious environmental incident occurs, contact the company's Environmental Manager and advise the Environment Agency using the 24 hour Emergency line **- 0800 80 70 60. Follow the incident procedure and take full notes and log all calls and actions.**

3.0 Contaminated land

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards to contaminated ground for inclusion in an Environmental Management Plan.

GENERAL – contaminated land is often a legacy issue and before Clive Grahams Associates Ltd acquires a new site or undertakes any work on any other site a thorough review will be undertaken to assess the impact from contaminated land. Clive Grahams Associates Ltd may fall liable for remediation if due diligence is not followed regarding this policy.

Environment Agency Guides

- GPLC 1 – guiding principles for land contamination introduction
- GPLC 2 – FAQs, technical information, detailed advice and references
- GPLC 3 – Reporting checklists

Should be consulted for information when necessary.

The Environment Agency has responsibility for land contamination issues from larger sites and will lead in emergency response; however the local authority will frequently take the lead on land contamination matters eg Contaminated Land Registers.

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Nominated Manager

- Overall responsibility for prevention and control of known contaminated land issues on site
- Develop section of the Environmental Management Plan to include prevention; remediation and control of known land contamination
- Ensure all sub-contractors abide by contaminated land guidelines
- Liaise with the Environmental Manager for all contaminated land issues

Environmental Manager

- Assist Managers in the development of the Environmental Management Plan regarding the prevention and control of land contamination issues
- Ensure all staff comply with the contaminated land guidelines

PROCEDURES

Operational Control Guidelines

1. Any areas of contaminated land must be identified from the site investigation data and contract documents so that its treatment and/or disposal can be managed.

2. If additional sampling or testing is required, this must be identified prior to the commencement of any works.

3. All operations involving contaminated land must be clearly identified and specific risk assessments and method statements must be prepared.

4. If contaminated materials are stored on site, the method of containment must prevent any escape of dust, leachate or other substances.

5. Disposal of contaminated materials off site must be to licensed sites and in accordance with the Waste Management Duty of Care.

6. All permanent and non-permanent employees, including sub-contractors, must be made aware of their responsibilities to ensure that contaminated land is unable to cause further pollution.

7. In the event that contaminated land causes further pollution then the Emergency Control Procedures stated below must be followed.

Emergency Control Procedures

1. When dealing with known contaminated land and 'run-off' is becoming a problem the Emergency Control Procedures for water pollution must be followed.

2. When dealing with known contaminated land and dust generation is becoming a problem the Emergency Control Procedures for air must be followed.

3. In addition to this all operatives in the area must be issued with dust masks to prevent ingestion of the contaminated materials.

4. Stop work immediately, seal off the area, and report to the Senior Manager in the event that one or more of the following are found:

    - Discoloured or oily soil (chemical or oil residues)
    - The soil has a fibrous texture (asbestos)
    - Presence of foreign objects (chemical/oil containers)
    - Evidence of underground structures and storage tanks
    - Existence of waste pits
    - Old drain runs and contamination within building and tanks

5. The contaminated materials must be tested at an approved laboratory to ascertain what hazards may be presented by the substance.

6. Following the receipt of the laboratory results a specific method statement and risk assessment must be prepared to dispose of/deal with the material. Approval will be needed from the Environment Agency and the Environmental Manager.

7. In the event that a serious environmental incident occurs, contact the company's Environmental Manager and advise the Environment Agency using the 24 hour Emergency line **- 0800 80 70 60. . Follow the incident procedure and take full notes and log all calls and actions.**

4.0 Ecology, Archaeology and Cultural Heritage

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards to ecology, archaeology, and cultural heritage for inclusion in an Environmental Management Plan.

GENERAL – protection of the ecological and heritage issues can be fraught with difficulties. Great care must be taken in the planning phase to ensure that all issues are properly considered and factored into controls and costings.

Great care must be taken not to inadvertently damage or disturb local flora and fauna that may be subject to protection orders. If in any doubt stop work and ask for competent advice.

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Responsible Manager

- Overall responsibility for ecology, archaeology, and cultural heritage
- Develop section of the Environmental Management Plan to include ecology, archaeology, and cultural heritage
- Ensure all staff and contractors comply with the ecology, archaeology, and cultural heritage guidelines
- Liaise with the Environmental Manager on all ecology, archaeology, and cultural heritage issues

Environmental Manager

- Assist Managers in the development of the Environmental Management Plan ecology, archaeology, and cultural heritage issues
- Ensure all staff comply with the ecology, archaeology, and cultural heritage guidelines

PROCEDURES

Operational Control Guidelines

1. Any contractual requirements for the preservation, monitoring and management of ecology, archaeology and cultural heritage issues must be prior to the commencement of any works that may disturb them.

2. All areas where ecological, archaeological and cultural heritage issues exist should be highlighted in the Environmental Management Plan.

3. Specific risk assessments and method statements must be completed for all operations that may impact on sensitive parts of the site. This is to ensure that all such operations are properly managed and controlled.

The Nominated Manager is responsible for liaising with English Heritage and other interested parties to ensure that no issues are overlooked when planning potentially disruptive works.

Strict controls shall be implemented where necessary to ensure that any persistent vegetation such as Japanese Knotweed is not allowed to spread around or off of the site. Similar controls should be implemented for injurious weeds such as Giant Hogweed.

4. Trees may be subject to Tree Protection Orders – therefore checks should be made prior to cutting down or trimming any trees. Care should be taken to protect the root systems of any protected trees to prevent damage.

5. All permanent and non-permanent employees, including sub-contractors, will be made aware of their responsibilities to ensure that damage to ecology, archaeology and cultural heritage is minimised.

6. If any item of potential archaeological significance is found on site; stop work in the immediate area and inform the Environment Manager for advice.

7. In the event that damage to ecology, archaeology and cultural heritage occurs then the Emergency Control Procedures below should be followed.

Emergency Control Procedures

1. In the event that damage to any ecology, archaeology and cultural heritage occurs work must be stopped immediately.

2. The incident must be reported to the Senior Manager.

3. The area should then be protected using Heras type fencing or similar.

4. Specialist advice should be sought from relevant organisations such as English Nature or English Heritage.

5. The Environmental Manager must be notified.

6. Special consent may be required before work can recommence from the relevant authority.

7. The reason for the problem occurring must be investigated and any changes made to future operations and programmes.

8. In the event that a serious incident occurs, contact the company's Environmental Manager.

5.0 Noise and Vibration

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards to noise and vibration for inclusion in an Environmental Management Plan.

GENERAL – Noise and vibration in this context is around the nuisance that can be caused which may generate complaints. Consult the Health and Safety policy regarding the effects of noise and vibration to human health.

Weather conditions can play a significant part in the perception of noise in the local area.

Pay particular attention to plant and equipment which may generate noise; activities such as running heavy machinery or piling that may generate impact noise and deliveries to site where reversing alarms may cause an issue.

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Responsible Manager

- Overall responsibility for control of noise and vibration on site
- Develop section of the Environmental Management Plan to include prevention and control noise and vibration
- Ensure all sub-contractors abide by noise and vibration guidelines
- Liaise with the Environmental Manager for all noise and vibration issues

Environmental Manager

- Assist Managers in the development of the Environmental Management Plan for environmental noise and vibration issues
- Ensure all staff comply with the noise and vibration guidelines
- Arrange a specific environmental noise assessment to assess the potential nuisance from site activities should this be indicated on the overall site risk plan.

PROCEDURES

Operational Control Guidelines

1. Requirements regarding the control of noise and vibration levels should be identified so that the appropriate control measures can be implemented.

2. The company's environmental policy and procedures will be taken into account when selecting plant and equipment and when developing safe systems of work.

3. Where it has been identified that buildings and services may be affected by noise and vibration, all necessary control measures are to be highlighted within applicable safe systems of work.

4. In sensitive areas, such as urban and commercial districts, liaison with the Environmental Health Officer will be needed to ensure that noise and vibration levels are maintained within permissible levels.

5. Noise emissions should be regularly monitored and recorded as deemed appropriate.

6. Where necessary vibration will be monitored to ensure that no structural damage is being caused to adjacent buildings and services.

7. Local residents and businesses are to be kept informed of when activities producing excessive noise and vibration are to take place.

8. All operations should be sequenced, where appropriate, to minimise the generation of noise and vibration, and where practical, plant and material stockpiles should be located to absorb noise emissions.

9. Where appropriate, prior consent will be sought from the local authority under **Section 61 of the Control of Pollution Act (Amended)1989.**

10. All employees, sub-contractors and suppliers will be made aware of their responsibilities and duties to ensure that noise and vibration generated by them is correctly managed and controlled.

11. In the event that noise and vibration emissions exceed permissible levels, then the following Emergency Control Procedures are to be followed.

Emergency Control Procedures

1. In the event of noise and vibration limits being exceeded, or following a reasonable complaint, the work or activity causing the noise/vibration is to be stopped.

2. Where appropriate plant is to be re-orientated to re-direct emissions away from sensitive receptors.

3. Where appropriate material is to be stockpiled to provide a noise barrier to absorb noise emissions.

4. Where appropriate erect additional noise barriers.

5. If these steps are unsuccessful in reducing emissions to an acceptable level then working practices and arrangements will be changed accordingly.

6. Monitoring shall take place throughout the operation to ensure compliance.

6.0 Sustainable Development

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards to sustainable development for inclusion in an Environmental Management Plan.

GENERAL – Sustainable development is development that will meet our present requirements without compromising the ability of future generations to meet their needs.

Reduction in the use of raw materials; using materials that are responsibly sourced; minimising waste and minimising energy usage are all part of the strategy for sustainable development.

Where the impact assessment indicates then a Life Cycle Assessment shall be conducted.

SCOPE

This procedure applies to all **Clive Grahams Associates Ltd** personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Nominated Manager

- Overall responsibility for control of onsite sustainable development issues
- Develop section of the Environmental Management Plan to include control of sustainable development
- Ensure all staff and contractors abide by the sustainable development guidelines
- Liaise with the Environmental Manager for all sustainable development issues

Environmental Manager

- Assist Managers in the development of the Environmental Management Plan regarding the control of resource consumption
- Ensure all employees are abiding by sustainable development guidelines

PROCEDURES

Operational Control Guidelines

1. All timber should, wherever practical, be from a temperate sustainable resource and certified as such from an independent inspection agency accredited by the Forest Stewardship Council (FSC).

2. Peat is not to be imported for use as a soil conditioner for landscaping or planting.

3. Imported soil conditioners will be free from peat and be produced from recycled and renewable materials free from weed seeds, disease and fungal organisms.

4. All materials will be accurately ordered to minimise waste.

5. Where possible the use of recycled materials and other environmentally friendly options should be investigated.

6. The work area will be kept tidy to minimise the risk of damage to materials.
7. All operations will be adequately supervised to ensure that the wastage is kept to a minimum.
8. All plant and office equipment will be turned off when not in use to conserve power/fuel.
9. Where possible the consumption of stationery in all offices will be used conservatively.
10. Waste paper and empty toner cartridges will be recycled.

7.0 Statutory Nuisance

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards to statutory nuisance for inclusion in an Environmental Management Plan.

GENERAL

Although there is no legal definition of a statutory nuisance, for action to be taken, the nuisance must, or be likely to be prejudicial to a person's health, or interfere with a person's legitimate use and enjoyment of land. This particularly applies to nuisance to neighbours in their homes, offices and gardens.

A statutory nuisance could arise from the poor state of the company's premises or sites, or from any noise, smoke, fumes, gases, dust, steam, smell, effluvia, the keeping of animals', deposits and accumulations of refuse and/or other material, and other discharges from company premises.

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Responsible Manager

- Overall responsibility for control of activities that may give rise to statutory nuisance on site
- Develop section of the Environmental Management Plan to include prevention and control of statutory nuisance
- Ensure all sub-contractors abide by statutory nuisance guidelines
- Liaise with the Environmental Manager for all statutory nuisance issues

Environmental Manager

- Assist Managers in the development of the Environmental Management Plan for statutory nuisance issues
- Ensure all staff comply with the statutory nuisance guidelines

PROCEDURES

Operational Control Guidelines

1. The procedures for air pollution, contaminated land, noise and vibration, and water pollution should be followed to prevent any statutory nuisance in these forms.

2. If the site is located adjacent to residential areas then any lighting that is required is to be located to minimise disruption through glare or light pollution.

3. All complaints from local residents are to be collated and where appropriate procedures developed to prevent any recurrence.

4. In the event of an incident involving statutory nuisance the Emergency Control Procedures below must be followed.

Emergency Control Procedures

1. Should any incident surrounding statutory nuisance occur, the appropriate operational procedures, as identified above, must be followed

2. All complaints shall be recorded and the Environmental Manager shall be notified.

3. Where problems occur regarding site lighting then the lighting shall be relocated to reduce the impact upon the surrounding residents and neighbours.

7.0 Traffic Management

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards to traffic management.

GENERAL – Traffic; particularly when there are likely to be frequent deliveries, can give rise to significant environmental impacts. For example -

- Noise and vibration
- Fuel usage
- Emissions
- Dust and mud generation
- Congestion

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Responsible Manager

- Overall responsibility for traffic management and for liaising with the local highway authorities
- Develop the Environmental Management Plan to include traffic management proposals
- Ensure all staff and contractors abide by traffic management requirements
- Liaise with the Environmental Manager for all traffic management issues

Environmental Manager

- Assist Managers in the development of traffic management proposals for the Environmental Management Plan
- Ensure all staff comply with the statutory nuisance guidelines

PROCEDURES

Operational Control Guidelines

1. All traffic management issues identified must be incorporated into the Environmental Management Plan.

2. Where appropriate, arrangements for deliveries should take place outside peak hours.

3. All access roads should be regularly monitored for damage and deposition of debris, where debris is found to be a problem, all debris should be quickly removed and the roads kept clean and tidy.

4. All plant should be regularly serviced to ensure that it does not cause excessive pollution and operates safely and efficiently.

5. In the event that a traffic management problem occurs the Emergency Control Procedures below should be followed.

Emergency Control Procedures

1. In the event that the increased numbers of traffic movements cause problems with congestion, road conditions or noise, then measures should be implemented to minimise them

2. Where congestion is occurring at the beginning and end of the day, the use of flexible working hours and staggered starting times should be considered.

3. Where excess debris is being deposited on local roads around the site, the incorporation of wheel washes and use of road sweepers should be considered.

8.0 Waste Management

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards to waste management.

GENERAL – Waste is subject to many controls and all efforts should be taken to minimise the amount of waste produced.

Wastes should always be segregated as far as possible but in particular controlled waste and hazardous waste should not be allowed to mix. Since all waste is subject to taxation this could result in an entire load being subject to a much higher rate of tax.

Wherever possible the waste hierarchy should be followed in accordance with the Waste (England and Wales) Regulations 2011.

- Reduction in the amount produced
- Reuse or prepare for reuse
- Recycle
- Recover e.g. energy recovery
- Responsible Disposal

Site Waste Management plans are no longer a legal requirement for construction projects but it remains good practice for all businesses to have a waste management plan

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Site Manager where construction projects are underway

- Overall responsibility for waste management on site
- Develop section of the Project Environmental Management Plan to include the management of waste, including the segregation of waste and the use of recycling initiatives
- Ensure all sub-contractors abide by waste management guidelines
- Liaise with the Environmental Manager for all waste management issues

Office Manager (or nominated person)

- Overall responsibility for waste management on premises
- Develop an Environmental Management Plan to include the management of waste, including the segregation of waste and the use of recycling initiatives
- Ensure all personnel abide by waste management guidelines

Liaise with the Environmental Manager for all waste management issues

Environmental Manager

- Assist Managers in the development of waste management proposals for the Environmental Management Plan
- Ensure all staff comply with the waste management guidelines

PROCEDURES

Office Waste Guidelines

1. All consumables and office supplies are to be used conservatively, including the recycling and reuse of supplies where practical.

2. Company paper is only to be used for business purposes and waste paper should be recycled rather than disposed of.

3. The use of double-sided copying and printing should be made wherever practical.

4. Scrap paper will be reused for draft printing whenever possible.

5. Office paper supplies will be discarded separately into segregated and designated recycling bins. All cardboard materials will be discarded separately into respective segregated bins. All other rubbish will be discarded in the normal manner.

OPERATIONAL CONTROL GUIDELINES

1. All work shall be carefully considered and implemented to minimise the generation of waste.

2. Where it has been identified that wastes are to be produced, or potentially produced, by a new project or activity, this will be clearly identified prior to the commencement of the work.

3. Specialist disposal requirements including any Waste Management Permit issues will be identified prior to commencement.

4. All employees, including sub-contractors will be requested to identify the types of waste that can be reduced, reused, or re-cycled on-site or off-site.

5. All employees, suppliers and sub-contractors will be made aware of their responsibilities to ensure the correct disposal of waste.

6. Where the production of hazardous wastes is envisaged, the Nominated Manager will liaise with the Environmental Manager and the appropriate Environment Agency office to determine the most appropriate method of disposal.

7. All sites producing hazardous waste of greater than 500kg per year must be registered with the Environment Agency.

8. Waste disposal contractors must possess the appropriate permit to dispose of the waste from site/premises. The nominated manager should periodically check the waste contractor's current permit.

9. All waste disposal operations shall comply with the Waste Management Duty of Care. A Waste Transfer Note/Consignment Notice will accompany all waste transfers. The Waste Transfer Note must be retained for a minimum of three years.

10. The storage requirements for wastes are to be identified to allow for the segregation of the waste and the prevention of odours, water pollution and the cross contamination of materials.

11. In the event of the escape of waste the Emergency Control Procedures below must be followed.

Emergency Control Procedures

Liquid Waste

1. In the event of liquid waste escaping management is to be notified.

2. The Responsible Manager is to notify the Environmental Manager and the appropriate Environment Agency office.

3. Stop the flow of pollution using earth, sand or polythene and divert away from drains and watercourses.

4. Deploy spill kits as necessary to contain and absorb the spill.

5. Contaminated sand, earth or granules must be disposed of as contaminated material

6. The reasons and cause of the escape must be thoroughly investigated, and recommendations made to prevent a reoccurrence.

Solid Waste

1. In the event of solid waste escaping the Responsible Manager is to be notified.

2. The waste that has escaped must be collected and placed into a secure skip.

3. Depending on the hazard presented by the material, specific personal protective equipment may be required.

4. The reasons and cause of the escape must be thoroughly investigated, and recommendations made to prevent a reoccurrence.

Odours from Waste

1. In the event that odours become a problem from waste storage, the skips/storage bins must be emptied immediately.

    2. If similar waste is likely, then covered skips/storage bins must be used and emptied regularly.

9.0 Water Pollution

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards to water pollution for inclusion in an Environmental Management Plan.

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Responsible Manager

- Overall responsibility for prevention of water pollution on site
- Develop section of the Environmental Management Plan to include water pollution
- Ensure all staff and contractors abide by the water pollution guidelines
- Liaise with the Environmental Manager and respective Environmental Agency for all water pollution issues
- Ensure that all materials that have the potential to cause pollution are stored correctly well away from water courses and drains. This includes ensure properly secured and bunded containers are used.

Environmental Manager

- Assist Managers in the development of water pollution proposals for the Environmental Management Plan
- Ensure all staff comply with the water pollution guidelines

PROCEDURES

Clive Grahams Associates Ltd will ensure that no contamination of adjacent watercourses and the groundwater will occur as a result of their operations. This will also include minimising the impact of operations upon wildlife habitats, aquatic flora and fauna, fisheries, recreation and amenity facilities and landscape features.

Clive Grahams Associates Ltd will ensure that any operations that may pose a threat to these areas are carefully planned and managed to minimise the risk of pollution and environmental damage.

Operational Control Guidelines

1. Water quality sampling requirements must be identified and implemented prior to the commencement of any works.

2. The requirement for discharge consents to watercourses, surface water drains or foul drains must also be identified as soon as possible.

3. All watercourses and drainage systems adjacent to the site are to be highlighted in the Environmental Management Plan.

4. Suitable storage areas should be prepared to ensure that the quality of surface water and ground water is not put at risk. This should include lockable storage and fully bunded containers capable of containing 110% of contents.

5. Storage should be monitored to take account of rainwater and any accumulated water should be sampled to ensure that it is within limits prior to pumping out.

6. Where the pollution risk is high then fitting of interceptors may be a requirement of the water pollution plan

7. On no account will anything unauthorised be put down a drain or washed out on site so that the pollution risk is increased.

8. If appropriate, the need for concrete wash out points will be identified and established on site.

9. All operations that are to take place in, above or adjacent to watercourses will be clearly identified, with specific risk assessments and safe systems of work being established prior to the commencement of any work.

10. All operations taking place in, above or near watercourses must be strictly supervised and monitored to ensure that no pollution incidents occur.

11. All permanent and temporary employees, including sub-contractors, are to be made aware of their responsibilities to ensure that no water pollution incidents occur.

12. In the event that a water pollution incident occurs then the Emergency Control Procedures below must be followed.

Emergency Control Procedures

1. All spillages, including fuel, oils, chemicals and silty run-off, must be reported to the Senior Manager.

2. Where appropriate, the Senior Manager must notify the Environmental Manager and the appropriate Environment Agency office.

3. The source of pollution must be identified and the flow should be stopped or diverted using spill kits, earth, sand or polythene and diverted away from all drainage systems and watercourses.

4. Where flammable substances are involved, any adjacent sources of ignition must be switched off.

5. An absorbent boom must be placed across watercourses to contain and absorb any spills.

6. Spillages must not be washed into drainage systems or watercourses and detergents must not be used.

7. All absorbent materials used to soak up the spill must be disposed of as contaminated material.

8. The incident is to be investigated with the Environmental Manager. The reasons and cause of the escape must be thoroughly investigated, and recommendations made to prevent a reoccurrence.

9. Details of the investigation and any changes to working practices will be reported to the Environmental Manager and where appropriate to the Environment Agency.

10. In the event that a serious environmental incident occurs, contact the company's Environmental Manager and advise the Environment Agency using the 24 hour Emergency line **- 0800 80 70 60**

10.0 Delivery, Storage, Refuelling and Spills of Fuel and Chemicals

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards of the delivery, storage, refuelling, and spillage of fuel and chemicals.

GENERAL

Most pollution incidents occur during filling procedures; very often because of overfilling or because incompatible liquids are mixed (e.g. acids and alkalis). It is vitally important that robust procedures are developed for filling and discharge.

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Responsible Manager

- Overall responsibility for the control of fuel and chemicals on site
- Development of a specific section for the Environmental Management Plan to address the delivery, storage, refuelling, and spills of fuel and chemicals
- Ensure all sub-contractors abide by these guidelines
- Liaise with the Environmental Manager on all issues regarding the delivery, storage, refuelling, and spills of fuel and chemicals

Environmental Manager

- Assist Managers in the development of procedures for the delivery, storage, refuelling, and spills of fuel and chemicals, for the Environmental Management Plan
- Ensure all staff comply with the guidelines

PROCEDURES

DELIVERIES

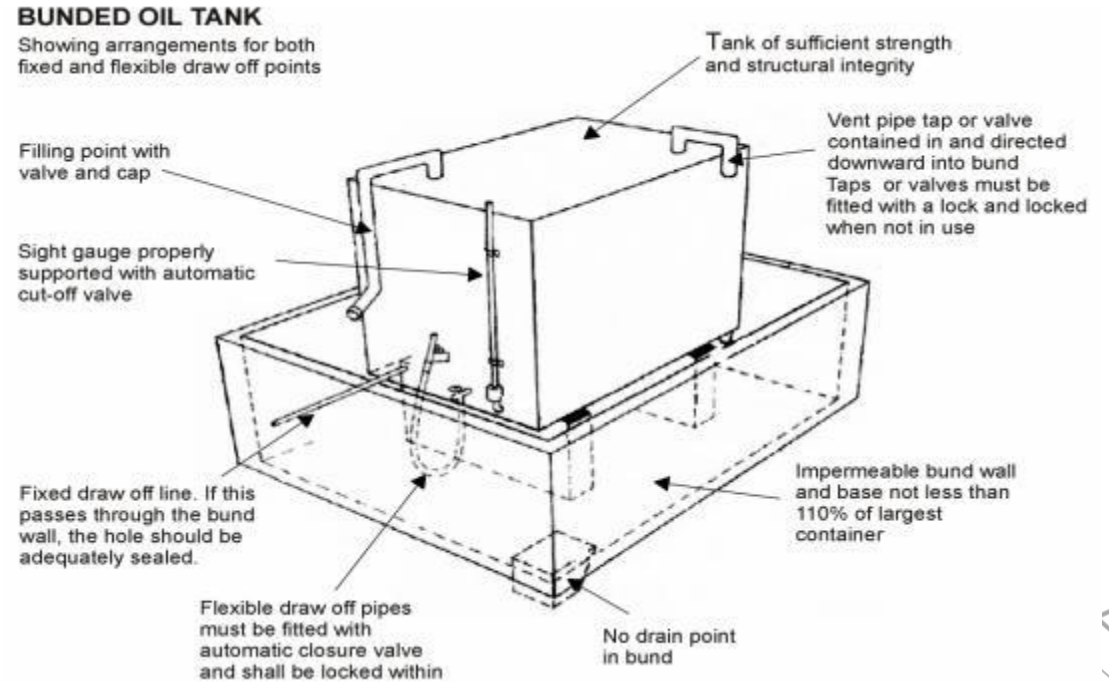
All deliveries will be supervised by a competent person capable of dealing with any spills or other incidents that may occur. The level of all storage tanks will be checked before delivery to prevent overfilling and to ensure that the product is delivered to the correct tank.

STORAGE

Fuel, oil and chemical tanks must be sited on an impervious base, within a secure bund. The base and bund must be impermeable to the substance being stored and have sufficient capacity for daily use and for the receipt of additional deliveries. Leaking, damaged or empty tanks/drums must be removed from the site immediately and disposed of via a licensed waste disposal contractor. All bowsers must be bunded to prevent any accidental spills.

All tanks and containers shall be stored in a secure, locked area, protected from vandalism, and clearly marked with the contents of the substance. To help limit the impact of any spills, all such storage areas should be located at least 10 metres from any drain or watercourse.

Where large quantities of fuel or oil are to be stored on-site, the above ground storage tank should be constructed to the relevant British Standard. The bund should be constructed to contain 110% of the capacity of the storage tank and monitored regularly for any build-up of rainwater. Any rainwater from within the bund must be treated as contaminated waste and should be appropriately disposed of appropriately to eliminate the potential for further pollution. The diagram below highlights the features that are required for the correct storage of fuels and oils.



SECURITY

All valves and trigger guns must be protected from vandalism and unauthorised use. When not in use they should be turned off and securely locked. Any tanks or drums should be stored in a secure container or compound, which should be kept locked when not in use. Bowsers must also be stored within secure compounds when not in use.

REFUELLING

All mobile plant will be refuelled in designated areas on an impermeable surface and away from drains, a spill kit will be available at all times

USE OF PLANT

All fuel operated plant and equipment shall be operated within strict controls, including the use of drip trays to contain any leaks or overflow etc.

SPILLS

Spill kits and absorbent booms shall be available on site, where a risk assessment recommends this, to ensure that in the event of a spillage the environmental impacts are kept to a minimum. In the event of a spillage occurring, this equipment shall be used to help minimise any environmental damage prior to the implementation of more comprehensive solutions. Nominated members of staff will be trained to use and deploy the spill kits in the event of an incident. In a serious emergency, where the spill kits are to be of no use, the Environment Agency, fire service and ambulance service shall be contacted as necessary dependent on the consequences of the spill. Any method statements shall identify emergency procedures for each operation.

Plant such as mobile generators shall be used in conjunction with drip trays to contain any leaks and overflows.

11.0 Efficiency and sustainable development

PURPOSE

The purpose of this procedure is to provide guidance and assistance with the development and production of specific procedures with regards efficiency and maintaining a sustainable environment

GENERAL

Businesses have a responsibility to reduce energy consumption, and operate businesses in an environmentally responsible and sustainable way. This can also have a great financial impact by cutting down waste in all its forms

SCOPE

This procedure applies to all Clive Grahams Associates Ltd personnel and operational activities. The responsibilities for implementing the procedure are outlined below.

Responsible Manager

- Overall responsibility for ensuring all activities are considered and where possible implemented
- Where capital investment is required then highlighting that for consideration
- Promoting sustainability throughout the site/business unit
- Nominating champions for specific issues

Environmental Manager

- Assist Managers in the development of procedures for the reduction of waste in all its forms for the Environmental Management Plan
- Ensure all staff comply with the guidelines
- Make a business case to senior managers where capital investment is required
- Monitor waste and identify savings

PROCEDURES

Engage staff in all aspects of sustainability and waste reduction
Conduct an audit of the site/business unit to identify possible efficiency measures

Specific requirement - Energy Performance Building Directive - The EPBD (directive 2002/91/EC) made a legal requirement for the energy certification of buildings in domestic, commercial and some industrial sectors. Any building that is built, sold or rented in the UK must now have an Energy Performance Certificate (EPC). Public buildings must also have a Display Energy Certificate (DEC) to give information about their energy efficiency. Energy practitioners involved in energy reporting or energy assessing buildings need to register as “Accredited Energy Assessors” through an approved accreditation body such as ECMK or CIBSE. All air-conditioning systems over 12kW must be regularly inspected by an Energy Assessor

Good housekeeping

- Switch off lights in unoccupied areas or where daylight is adequate. This could cut lighting costs by as much as 15%, just by making sure you turn lights off in rooms and corridors that aren't being used.
- Make sure windows and skylights are clean and free from obstructions to make maximum use of daylight.
- Turn off interior display lighting out of hours.
- Label switches clearly so that lights can easily be turned off in unwanted areas.
- Ensure external lights are not on during daylight hours
- Computer screens, photocopiers and printers should be turned off when not in use and base units turned off at the mains overnight.
- Check that doors and windows are not left open unnecessarily in winter.
- Check taps are not dripping or left running.
- Check room thermostats and thermostatic radiator valves are on the correct settings.

Heating Systems

- Turning down the thermostat by 1oC can reduce the annual heating bill by 8-10%.
- Keep furniture clear of heaters and radiators so that heating is not obstructed.
- Keep all heating and air handling filters clean. Dirty filters lead to loss of heat output with consequently longer running times.
- Set your heating to match occupancy: use timers to preheat buildings in good time for occupancy, avoid heating unused areas and make sure the building is not heated when not in use.
- Check boilers and thermostats - serviced boilers can save up to 10% on heating costs.
- Make sure the time switches are set to the correct time and correct day.
- Reduce 'on' times where you can.
- Make sure that the heating isn't too hot in mild weather or too cold in severe weather.

Lighting Systems

- Can lighting levels be reduced? Switch off or dim unnecessary lights.
- Don't use more light than you need. If you're only working in one part of the room, why have all the lights on?
- Clean and check diffusers and reflectors.
- Use the most energy efficient bulbs available. If you have fluorescent tube lighting, replacing T12 tubes with T8s will reduce the lighting energy demand by 10%. LED lighting even more so
- Can the hours of availability of hot water be reduced?
- Hot Water systems
- If electricity is used to heat water, can it be done on a cheap rate tariff at night?
- Check the insulation around pipe-work and tanks and replace any damaged or missed sections.

Compressed Air Systems

- Can the pressure be lowered? Check the requirements of your equipment and tools (reducing pressure by 10% can lead to a 5% energy saving). Make small, incremental reductions, checking that operations are not affected.
- Power delivered by compressed air is convenient but expensive - are there cheaper alternatives for some jobs?
- Turn compressors off during breaks and when not required (an idling compressor uses around 40% of its full load).
- Can power be delivered more efficiently? For instance, fitting a venture-type nozzle can use 30% less compressed air.
- Fix air leaks immediately

Water Savings

- Make sure you know where your water meter is. Regular meter readings can help you locate underground leaks before too much has been wasted.
- Make sure urinals don't flush through the night. Devices which prevent urinals from wasting water can pay for themselves in a few months.
- Check overflow pipes and cisterns for running water.
- Encourage good housekeeping and efficient use of water within all areas of the site.
- Repair all dripping taps as soon as possible. Check for leaks in water systems regularly.
- Fit flush controls to urinal systems in all gents' toilets.
- Consider fitting percussion taps to turn off water automatically in washrooms.
- Consider fitting pistol grip controls to all hosepipes.

Waste

Waste is produced from all parts of an organisation. Waste minimisation is about optimising all areas of the business to be more resource efficient and thus prevent, or at least minimise, the production of waste. Try at all times to follow the waste management hierarchy

The waste hierarchy

- Eliminate waste at source
- Reduce the amount produced
- Re –use eg packaging and pallets
- Re cycle
- Dispose

Some areas for consideration

Production waste

- Look with a 'fresh pair of eyes' at existing activities and ask why as much as possible.
- Look at how raw materials are used, stored, handled and moved and question 'accepted' levels of waste.
- Look at how processes operate and why waste is generated.
- Consider how much of what goes into a process or activity finds its way into a product that has value to customers.
- Quantify and reduce the amount of ancillary materials such as solvents, water, additives, etc that are used but are not present in the final product.
- Quantify and reduce the use of consumables such as personal protective equipment, filters, packaging, etc.
- Eliminate unnecessary temporary storage, process steps and movements.
- Assess the amount of packaging used. Consider whether all of it is really necessary. Choose minimally packaged products where possible. Ask suppliers to take excess packaging away with them when making a delivery or to switch to re-usable packaging.
- Segregate different wastes to enable re-use, recycling or, at least, a reduction in disposal costs. Waste segregation should occur as near to source as possible to reduce the risk of contamination and enable maximum value to be obtained through recovery.
- Change delivery quantities and/or sizes of containers used, eg from drums to intermediate bulk containers but remember that smaller delivery quantities/containers may sometimes be appropriate to reduce labour and potential damage during double handling after delivery.
- Change cutting plans and/or nesting patterns to improve the utilisation of sheet materials.
- Minimise the effort put into achieving the right quality through reworking.

Office and general

- Set the default on photocopiers to duplex (double-sided copying). Surveys have shown that
- this can reduce paper use by 10% or more. Question whether you need to print or photocopy draft copies at all.
- Ask the photocopier supplier to provide short training courses for people using the copiers. This will reduce the number of mistakes and introduce them to the paper-saving features on many machines.
- Switch off the cover sheet option on networked printers and fax machines.
- Avoid mistakes by checking spelling and layout before printing. Do a one-copy trial run before requesting large multiple print and photocopies.
- Using lower weight paper can reduce paper use. Photocopier paper is normally 80 gsm, while
- higher quality letter and presentation paper is typically 90 - 120 gsm. Reducing the weight of all paper to 70 gsm can reduce the amount used by weight by up to 12.5%.
- Reducing the default font sizes and margins for electronic templates and documents can increase the amount of information per side without affecting readability.
- Use e-mail and file it in an e-mail folder rather than print it out automatically.

- Make someone responsible for returning unwanted mail and removing contact details from mailing databases. This is particularly useful if someone has left and is still receiving unwanted post.
- Use refillable pens and markers.
- Drinks machines. Make sure these allow for use of china mugs rather than plastic disposable vending cups.
- Packaging. Encourage suppliers to provide goods in minimal amounts of packaging. Return
- packaging to suppliers if you can't make use of it.
- Create a central deposit for used, but usable, supplies. Document wallets, clear envelopes
- and cardboard boxes can often be used several times.
- Try to use durable, high-quality stationery supplies such as re-usable paper clips or treasury
- tags rather than single-use staples wherever possible.
- Collect paper that has been used only on one side and use it for drafting, note-taking, etc.
- Many printers and photocopiers have multi-trays and thus allow a dedicated tray to be filled
- with part-used paper.
- Re-use envelopes where possible, especially for internal post.
- To increase the effectiveness of paper recycling, the number and location of collection bins needs careful consideration. The shorter the distance people have to walk, the greater the likelihood that paper will be recycled. A waste paper tray at each desk is ideal; this can act as a scrap paper tray and be emptied into the main collection bin when full. Position bins near photocopiers, but put up a notice reminding people to re-use single-sided copies rather than discard them.
- Ensure that recycling bins are emptied by cleaning staff and porters as part of their contract.
- Seek support from their supervisors and arrange for the waste paper to be collected by a recycling specialist.
- Use 100% recycled paper (with maximum post-consumer waste content) as standard.
- Toner cartridges. A growing number of companies now recycle toner cartridges and sell
- remanufactured cartridges. Remanufactured goods are often accompanied with a guarantee
- and many distributors claim that they provide a better print quality and produce up to 20%
- more prints than a normal cartridge.
- Aluminium cans. Aluminium is a widely used and easy to collect material. Ensure that
- aluminium cans are segregated from other metal cans in the collection bin
- Packaging. Flatten or compact cardboard or other bulky packaging to make collections for
- recycling easier and more efficient. Segregate cardboard to prevent contamination

(Source WRAP)

12.0 Environmental Impact/Risk Assessments

A key element of the Environmental Protection Act 1990 is to identify the impacts our business operations have on our surrounding environment. The environmental impacts of all work carried out by Clive Grahams Associates Ltd will be assessed prior to the commencement of any operations which may have an adverse impact on the environment. These assessments will be monitored and reviewed on an annual basis and amended where appropriate to cater for the requirements of specific projects.

All senior managers should consider the impact their operations have on the environment and raise a formal environmental risk assessment using the template provided in Section 3 of this Manual. Guidance covering the areas and elements to be considered within such risk assessments should be drawn from the contents of this Manual, the contract documentation and any site specific requirements.

Contractors and other staff working for Clive Grahams Associates Ltd should make themselves aware of any assessments that have been undertaken to address the activities that they are carrying out. Any actions that are required to keep these assessments valid and relevant must then be followed.

The basic stages to be adopted when carrying out an environmental risk assessment are as follows:

Stage 1: Hazard identification

Guidance defines a *hazard* as a "property or situation that in particular circumstances could lead to harm". This may be determined by properties or circumstances and could include, for example, the release of chlorofluorocarbons (CFCs); a tidal surge along a stretch of the coast; a dry summer leading to low river flows; or the planting of a genetically modified crop. Where risk assessments are to be applied, the hazards may be as broad as the adverse impacts of road transport on the environment, or the adverse impacts of induced climate change from the contribution of fossil fuel-derived carbon dioxide emissions.

The identification of relevant hazards will therefore have an important bearing on the overall assessment and the credibility of the final assessment.

One common pitfall in establishing the hazards is to overlook secondary hazards that may arise. For example, during a river flood, sediments may be deposited within the working area. If these sediments were to be contaminated, they might pose an additional hazard.

Stage 2: Identification of consequences

The potential consequences that may arise from any given hazard are inherent to that hazard. Although the full range of potential consequences must be considered at this stage, no account is taken of likely exposure and therefore likely consequences. For example, while the potential consequences of a discharge of toxic metals to a watercourse may be self-evident, a flood may have additional, non-obvious consequences such as pollution arising from an over-stretched sewerage system, or loss of habitats due to river scouring.

These examples help to highlight why it is necessary to take a broad look at the potential environmental damage that may occur, if only to be clear why some potential consequences are rejected for further assessment.

Stage 3: Estimation of the severity of consequences

The consequences of a particular hazard may be actual or potential harm to human health, property or the natural environment. The severity of such consequences can be determined in different ways depending on whether they are being considered as part of a risk screening process, or as part of a more detailed quantification of risk. At all stages of risk assessment several key features need to be considered, as described below.

The spatial scale of the consequences

The geographical scale of harm resulting from an environmental impact will often extend considerably beyond the boundaries of the source of the hazard. Failure to consider this at an early stage may result in the scope of the risk assessment being too limited. For example, a major accident in a chemical plant is likely to have significant effects on the environment well beyond the perimeter of the site.

The temporal scale of the consequences

The duration of the harm that results may be so prolonged that the damage can be assumed to be permanent and the environment beyond recovery. For example, the release of a genetically modified crop could result in extensive cross-breeding with adjacent indigenous flora, any harmful environmental impacts could extend far into the future.

The time to onset of the consequences

A further factor to consider is how quickly harmful effects might be seen. Standard economic techniques tend to discount impacts that will happen in the future but sustainable development emphasises the need to protect the interests of future generations. Risk assessment and management must therefore pay as much attention to long-term problems as to the more immediate risks. For example, the spillage of a solvent on porous ground may not result in an impact on the underlying aquifer for decades. However, once realised, the duration of the harm is likely to be of the order of decades and will compromise the value of that aquifer as a source of water for future generations.

Stage 4: Estimation of the probability of the consequences

The above stages have assumed that realisation of the hazard will lead to environmental harm. However, the probability or likelihood of the consequences occurring must also be taken into account. This has three components:

The probability of the hazard occurring

The probability of the receptors being exposed to the hazard

The probability of harm resulting from exposure to the hazard

Stage 5: Evaluating the significance of a risk

Having determined the likelihood and severity of the consequences that may arise as a result of the hazard, it is important to place them in some sort of context. It is at this point that some value judgements are made, either through reference to some pre-existing measure, such as an environmental quality standard or flood defence standard, or by reference to social, ethical, or political standards.

Options appraisal

Having estimated the magnitude and the significance of the risks posed by the hazard(s), the options for risk management are identified and evaluated. It is important to carry out this procedure as a distinct preliminary step because ill-considered risk management strategies may otherwise result in wasted effort and expenditure on the part of the decision-maker. The options that will usually be available are:

- exploring the acceptability, or otherwise, of the risk - this can include rejecting unacceptable risks altogether or accepting the risk being imposed;
- reducing the hazard through new technology, procedures or investment; or
- mitigating the effects, through improved environmental management techniques.

The decision on precisely which option or combination of options to choose will involve a balance of risk reduction, costs, benefits and social considerations.

13.0 Environmental Performance Monitoring and Review

The Environmental Manager will review the company's environmental performance and the effective implementation of the environmental management policy. The annual review shall cover:

I. Environmental management monitoring results.

II. Environmental management inspection results

III. Comparison with the objectives stated in the previous review.

IV. Effects and requirements of new legislation or changes to best practice guidance.

Irrespective of time periods, a review shall be conducted in the event of:

I. Significant environmental incident.

II. Incidence of Environment Agency enforcement action.

III. Major change to environmental management arrangements or company activities.

14.0 Environmental Management Information

The company will periodically purchase and maintain a selection of key environmental management documents and reference material for use by its staff and employees. These will be retained within the company's offices and requests for additional material shall be made via the Environmental Manager.

An Environmental Management notice board will be erected within the company offices and copies of all Environmental Alerts/Notices and other environmental related information shall be displayed on the notice board.

Section Three

Miscellaneous Forms

15.0 Environmental Legislation

The following table lists all relevant environmental legislation that applies to Clive Grahams Associates Ltd activities, products, and services.

Air Pollution
Statutory Nuisance (Appeals) Regulations 1995 Clean Air Act 1993 Clean Air (Emission of Dark Smoke) (Exemption) Regulations 1969 Road Vehicles (Construction & Use) Regulations 1986 (as amended) 2003 Town & Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 Environmental Protection Act 1990, Part I and III, ss. 79-84 Environmental Protection (Prescribed Processes and Substances) Regulations 1991 (SI 1991 No. 472) Environmental Protection (Applications, Appeals and Registers) Regulations 1991 (SI 1991 No. 507), as amended Environment Act 1995, Part IV The Pollution Control and Local Government (Northern Ireland) Order 1978, section 40
Contaminated Land
Environmental Protection Act 1990, Part I and IIA Environmental Protection (Prescribed Processes and Substances) Regulations 1991 (SI 1991 No. 472) Environmental Protection (Applications, Appeals and Registers) Regulations 1991 (SI 1991 No. 507), as amended Environment Act 1995, Part II Water Resources Act 1991 Anti-Pollution Works Regulations 1999 Contaminated Land (England) Regulations 2000 Town & Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 Water Act 2003 Waste and Contaminated Land (Northern Ireland) Order 1997 Section 5 The Pollution Control and Local Government (Northern Ireland) Order 1978, section 40
Ecology, Archaeology & Cultural Heritage
Town & Country Planning Act 1991 Town & Country Planning (Trees) Regulations 1999 Planning (Listed Buildings & Conservation Areas) Regulations 1990 Wildlife & Countryside Act 1981 Ancient Monuments & Archaeological Areas Act 1979 Hedgerow Regulations 1997 Conservation (Natural Habitats) Regulations 1994 Protection of Badgers Act 1992 Countryside & Rights of Way Act 2000
Landfill
Landfill Tax Regulations 1996 (SI 1996 No. 1527) The Landfill (England & Wales) Regulations 2002 The Landfill Directive (1999)
Noise and Vibration
Environmental Protection Act 1990, ss. 79-84, part I & III

Control of Pollution Act 1974, section 60/61
Pollution Prevention and Control Act 1999
Control of Noise (Code of Practice for Construction and Open Sites) Order 1984 (SI 1984 No. 1992)
Control of Noise (Code of Practice for Construction and Open Sites) Order 1987 (SI 1987 No. 1730)
BS 5228: Control of Noise and Vibration on Construction & Open Sites
Town & Country Planning Act 1990
Noise & Statutory Nuisance Act 1993
Control of Noise (Appeals) Regulations 1975
Construction Plant & Equipment (Harmonisation of Noise Emissions Standards) Regulations 1985 & 1987
Noise Insulation Regulations 1975 (SI 1975 No. 1763)
Noise Insulation (Scotland) Regulations 1975 (SI 1975 No. 460)
Town & Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999

Planning

Noise and Statutory Nuisance Act 1993
Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (SI 1988 No. 1199)
Planning (Hazardous Substances) Regulations 1992 (SI 1992 No. 656)
Town and Country Planning (Hazardous Substances) (Scotland) Regulations 1993 (SI 1993 No. 323).
Planning (Hazardous Substances) Act 1990
Town and Country Planning (Scotland) Act 1972

Statutory Nuisance

Environmental Protection Act 1990, Part III
Noise & Statutory Nuisance Act 1993
Statutory Nuisance (Appeals) Regulations 1995
Town & Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999

Traffic Management

Highways Act 1980
Town & Country Planning Act 1990
Road Vehicles (Construction and Use) Regulations 1986
Common Law
Construction Plant & Equipment (Harmonisation of Noise Emissions Standards) Regulations 1985 & 1987
Town & Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999

Waste

Waste (England and Wales) Regulations 2011
Environmental Effects (Scotland) Regulations 1988 (SI 1988 No. 1221)
Environmental Protection (Duty of Care) Regulations 1991
Controlled Waste Regulations 1992
Waste Management Licensing (Amendment) Regulations 1997
Environment Act 1995 - Part II (Replacing Part I of Control of Pollution Act 1974)
Landfill Tax (Contaminated Land) Order 1996
Town & Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999
Environmental Protection Act 1990, Part II and IV

Waste Management Licensing Regulations 1994 (SI 1994 No. 1056)
Control of Pollution (Amendment) Act 1989
Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991 (SI 1991 No. 1624)
Waste and Contaminated Land (Northern Ireland) Order 1997 Section 5
The Hazardous Waste (England and Wales)Regulations 2005 (SI 2005 No. 894)
Clean Neighbourhoods and Environment Act 2005

Water Pollution

Landfill Tax (Qualifying Material) Order 1996 (SI 1996 No. 1528)
Water Industry Act 1991 (for England and Wales)
Sewerage (Scotland) Act 1968
Water Resources Act 1991 (for England and Wales)
Anti-Pollution Works Regulations 1999
Control of Pollution (Applications, Appeals & Registers) Regulations 1996
Environmental Protection Act 1990, Part I
Environmental Protection (Prescribed Processes and Substances) Regulations 1991 (SI 1991 No. 472)
Environmental Protection (Applications, Appeals and Registers) Regulations 1991 (SI 1991 No. 507), as amended
Groundwater Regulations 1998
Control of Pollution (Oil Storage)(England) Regulations 2001
Salmon & Freshwater Fisheries Act 1975
Water Act 2003
Town & Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999
Town & Country Planning Act 1991
The Pollution Control and Local Government (Northern Ireland) Order 1978, section 40

Glossary of Key Environmental Terms

BAT: Best Available Techniques, defined under Integrated Pollution Prevention and Control (IPPC). Note that BAT has many more cost and implementation issues than its predecessor BATNEEC.

BATNEEC: Best Available Techniques Not Entailing Excessive Cost, defined under Integrated Pollution Control (IPC). Not often used now

Biodiversity: The range of plant and animal species and communities associated with terrestrial, aquatic and marine habitats.

Biological treatment: Any biological process that changes the properties of waste (for example, anaerobic digestion, composting). Biological treatment includes land spreading activities that are licensed.

BPEO: Best Practicable Environmental Option, a procedure that takes into account the total impact of a process and the technical possibilities for dealing with it. BPEO establishes the waste management option, or mix of options, that provides the most benefits or the least damage to the environment as a whole, at acceptable cost, in the long-term as well as in the short-term.

Climate Change Levy: A tax introduced on 1 April 2001, which is designed to stimulate business improvements in energy efficiency.

Controlled waste: The UK term for wastes controlled under the Waste Framework Directive: any household, industrial or commercial waste.

DEFRA: Department for Environment, Food and Rural Affairs

Eco-efficiency: The delivery of competitively priced goods and services that satisfy human needs and bring quality of life, while progressively reducing environmental impacts and resource intensity throughout the life cycle, to a level at least in line with the earth's estimated carrying capacity.

ELV(s): End of Life Vehicle – scrap cars and other vehicles. The subject of an EU Directive.

EMAS: (European) Eco-management and Audit Scheme. A European voluntary scheme for industrial sites. To register under EMAS your company should have a clearly defined strategy for environmental management, complete with quantified objectives.

EMS: Environmental Management Systems: the part of an overall management system that includes organisational structure, planning activities, responsibilities, practices, procedures, processes and procedures for developing, implementing, achieving, reviewing and maintaining the environmental policy (see *ISO 14001*).

Energy recovery: The recovery of useful energy in the form of heat and/or power from burning waste. Generally applied to incineration, but can also include the combustion of landfill gas and gas produced during anaerobic digestion.

Environment Agency: The principal environmental regulator in England and Wales. Established in April 1996 to combine the functions of former waste regulation authorities, the National Rivers Authority and Her Majesty's Inspectorate of Pollution. Intended to promote improved waste management and consistency in waste regulation across England and Wales.

Environmental accounting: Any quantitative approach to linking financial and environmental performance.

Environmental footprint: The impact of an organisation in environmental terms (resource use, waste generation, physical environmental changes etc.).

Environmental Technology Best Practice Programme (ETBPP): A Government (DEFRA) initiative to demonstrate the benefits of reducing resource use and environmental impact to companies across the whole of the UK.

EU Directive: A European Union (formerly EC-European Community) legal instruction, binding on all Member States but which must be implemented through national legislation within a prescribed time-scale.

Exempt facility: A waste recovery operation (also occasionally certain disposal at the waste producer and some storage activities) registered with, but not licensed by, the Environment Agency. Exempt facilities are subject to general rules (e.g. on the types and quantities of wastes received).

Hazardous waste: Defined by EU legislation as the most harmful wastes to people and the environment. Hazardous wastes are listed in the 'List of Wastes (England) Regulations 2005.

Fauna: The collective term for animal life.

Flora: The collective term for plant life.

Incineration: The burning of waste at high temperatures in the presence of sufficient air to achieve complete combustion, either to reduce its volume (in the case of municipal solid waste) or its toxicity (for example, for organic solvents). Municipal solid waste incinerators recover heat and/or power. The main emissions are carbon dioxide, water and ash residues.

Industrial waste: Waste from any factory or industrial process (excluding mines and quarries).

Inert waste: Chemically inert, non-combustible, non-biodegradable and non-polluting waste defined in the EU Directive on the Landfill of Waste.

IPC: Integrated Pollution Control, a system introduced under the Environmental Protection Act1990, which controls polluting substances from industrial processes to the three environmental media of air, land and water. IPC was designed to ensure that best available techniques not entailing excessive costs are used to prevent, or where that is not practicable, to reduce, emissions from a range of the potentially most polluting industrial processes, including some waste management facilities. Gradually being

replaced with Pollution, Prevention and Control requirements under the EU IPPC Directive.

IPPC: Integrated Pollution Prevention and Control, an EC Directive implemented in the UK by the Pollution Prevention and Control (England and Wales) Regulations 2000. This is similar to IPC but also covers noise, vibration, resource minimisation, energy efficiency, environmental accidents and site protection and covers more industrial processes.

ISO 14001: An environmental management system (EMS) is a systematic approach to dealing with the environmental impacts of an organisation. It is a framework that enables an organisation of any size or type to control the impact of its activities, products or services on the natural environment. ISO 14001 Environmental management systems is an international standard that specifies the requirements.

Landfill (sites): Licensed facilities where waste is permanently deposited for disposal.

Landfill tax: A tax that applies to active and inert waste, disposed at a licensed landfill. The aim of the tax is to send a tough signal to waste managers to switch to less environmentally damaging alternatives to disposal.

Land spreading: Recovering waste by spreading onto land principally for agricultural benefit or ecological improvement. Sewage sludge and wastes from, for example, the food, brewing and paper pulp industries can be used for this purpose.

LFD: Landfill Directive

Licensed site/Waste management facility: A waste disposal or recovery facility licensed under the Environmental Protection Act.

Life Cycle Analysis (Assessment): LCA is a systematic technique for identifying and evaluating the potential environmental benefits and impacts (use of resources; human health; ecological consequences) associated with a product or function throughout its entire life from extraction of raw materials to its eventual disposal and assimilation into the environment. LCA helps to place the assessment of the environmental costs and benefits of these various options, and the development of appropriate and practical waste management policies, on a sound and objective basis.

Pollution incidents:

- Category 1: incidents having persistent and extensive impact on land, air or water.
- Category 2: incidents having significant impact on land, air or water.
- Category 3: incidents having minimal impact on land, air or water.

Process Mapping: A logical step by step representation of business activities showing key inputs/outputs.

Producer responsibility: Requires industry and commerce involved in the manufacture, distribution and sale of particular goods to take greater responsibility for the disposal and/or recovery of those goods at the end of their useful life.

Recovery: Involves the recovery of value from waste, through recycling, composting or incineration with energy recovery.

Recycling: Involves the reprocessing of wastes, either into the same material (closed-loop) or a different material (open-loop recycling). Commonly applied to non-hazardous wastes such as paper, glass, cardboard, plastics and metals. However, hazardous wastes (such as solvents) can also be recycled by specialist companies, or using in-house equipment.

Reduction: Reducing the quantity or the hazard of a waste produced from a process. It usually results in reduced raw material and energy demands – thus also reducing costs.

Re-use: Using materials or products again, for the same or a different purpose, without material reprocessing (such as glass milk bottles or returnable plastic crates).

Sustainable development: Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable waste management: Using material resources efficiently to cut down on the amount of waste produced. And, where waste is generated, dealing with it in a way that actively contributes to the economic, social and environmental goals of sustainable development.

TCOW: True Cost of Waste. The cost of waste is always much greater than just the cost of disposal, and can be as much as 5-10% of a company's turnover. Waste disposal is the obvious 'visible' cost but there are numerous hidden costs.

Treatment: Involves the physical, chemical or biological processing of waste to reduce their volume or harmfulness.

Waste hierarchy: The ranking of waste management options in order of sustainability.

Waste management: Management of the collection, recovery and disposal of wastes, including options for waste reduction.

Waste minimisation: The reduction of waste at source, by understanding and changing processes to reduce and prevent waste. This is also known as process or resource efficiency. Waste minimisation can include the substitution of less environmentally harmful materials in the production process.