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1.0 Background to Environmental Management at Queen's University

A high level committee, the Environmental Issues Advisory Group (EIAG), responsible for environmental issues has been in place within the University as far back as 1999.

The EIAG was tasked with developing an Environmental Policy Statement and with monitoring and auditing the University's environmental policies and practices.

The first University Environmental Policy Statement was produced by the Group in 2000 and approved by Senate in the same year.

Although that version of the Policy was well constructed, it was at times too specific, which may have lead to misinterpretation by interested parties.

In addition, it also had no commitment to comply with legal requirements and did not include a specific reference to continually improve. It was also not signed off to demonstrate senior management commitment.

The EIAG's membership was expanded in 2000 and it became the Forum for the Future Steering Group with the specific purpose of managing the Higher Education Partnership for Sustainability (HEPS) initiative within the University.

Forum for the Future is the UK's leading sustainable development charity which works with companies, local authorities, regional bodies and Universities and Colleges to help them overcome barriers to more sustainable practice. The HEPS initiative organised and facilitated through Forum for the Future was a partnership between 18 UK Universities and Colleges. Its aim was to promote real engagement within the sustainability agenda within the further and higher education sector.

On completion of the HEPS initiative in 2003, a new Sustainability Advisory Group was created to continue with the work completed within HEPS in order to maintain momentum of environmental management at the University. It was under the guise of this new Group that the Environmental Policy Statement was subsequently reviewed and redrafted in 2004 with the aims to

- a) enhance the University's commitments to Environmental Management
- b) avoid misinterpretation by interested parties
- c) ensure that the Policy was in line with best practice i.e. that it met the requirements of the ISO14001 Environmental Management Systems Standard

A full time Environmental Manager was appointed in 2004 to manage and enhance those initiatives both already completed and identified for introduction. Such initiatives include enhancing recycling, improving waste management, completion of an initial environmental review of the University and establishing an environmental management system within the Estates and Purchasing Departments.

2.0 Ownership

It shall be the responsibility of the Environmental Manager to ensure that this specification reflects current practice and requirements at all times.

2.1 Circulation

The Environmental Management System (EMS) is issued on controlled circulation under the responsibility of the Environmental Manager. The System Procedures are all stored and accessible electronically on the Estates Department website. The procedures are divided into the following groups.

EMS Procedures-

These are the primary EMS procedures explaining the core elements of the Estates and Purchasing Departments' Environmental Management System

EMS Operational Control Procedures-

These are the secondary supporting procedures which are in place to control and reduce the environmental impacts of the Estates and Purchasing Departments' operations

Environmental Records-

These are records maintained to demonstrate the effectiveness of the EMS

All amendments made to procedures are documented, and obsolete copies are held, in paper and/ or electric format by the Environmental Services Team .

The control of all Environmental Management System documentation is the responsibility of the Environmental Services Team .

3.0 Definitions

Continual Improvement:

Process of enhancing the Environmental Management System to achieve improvements in overall performance in line with the organisation's environmental policy.

Note: The process need not take place in all areas of activity simultaneously.

Environment:

Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation.

Note: Surroundings in this context extend from within an organisation to the global system.

Environmental Aspect:

Element of an organisation's activities, products or services that can interact with the environment.

Note: A significant environmental aspect is an environmental aspect that has or can have a significant environmental impact.

Environmental Impact:

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services.

Environmental Management System: (EMS)

The part of the overall management system that includes organisation structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the Environmental Policy.

Environmental Management System Audit:

A systematic and documented verification process of objectively obtaining and evaluating evidence to determine whether an organisation's Environmental Management System conforms to the Environmental Management System audit criteria set by the organisation, and for communication of the results of this process to management.

Environmental Objective:

Overall Environmental goal, arising from the Environmental Policy, that an organisation sets itself to achieve, and which is quantified where practicable.

Environmental Performance:

Measurable results of the Environmental Management System, related to an organisation's control of its Environmental Aspects based on its Environmental Policy, Objectives and Targets.

Environmental Policy:

Statement by the organisation of its intentions and principles, in relation to its overall environmental performance, which provides a framework for action and for the setting of its Environmental Objectives and Targets.

Environmental Target:

Details performance requirement, quantified where practicable, applicable to the organisation or parts thereof, that arises from the Environmental Objectives and that needs to be set and met in order to achieve those objectives.

Interested Party:

Individual or group concerned with or affected by the Environmental Performance of an organisation.

Organisation:

Company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration.

Note: For organisations with more than one operating unit, a single operating unit may be defined as an organisation.

Prevention of Pollution:

Use of processes, practices, materials or products that avoid, reduce or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution.

Note The potential benefits of pollution include the reduction of adverse environmental impacts, improved efficiency and reduced costs.

Sustainable Development:

“Meeting the needs of the current generation without compromising the ability of future generations to meet their own needs”

Environmental Record Keeping

Relates to records held by individual departments relating to the Environmental Management System.

Environmental Management System Procedures

The Environmental Procedures Manual sets out in detail the procedures within the organisation which describe how the University's Environmental Policies are to be met.

In turn, the Estates and Purchasing Departments' procedures identify the records, forms and other support materials which provide evidence of the operation Related Record

4.0 Environmental Management System Requirements

4.1 Scope of Environmental Management System

The scope of the Environmental Management system is as follows;
'The provision of an Estates Management and Purchasing service for Queen's University Belfast'

4.2 Environmental Manual Format

4.2.1 Purpose

The purpose of this Environmental Manual is to describe the environmental management system in operation at Queen's. This document also provides reference to related documentation.

4.2.2 Scope

This Environmental Manual applies to all activities carried out in the University's Estates and Purchasing departments associated with compliance to ISO 14001. It is the principal document that defines the elements of the Estates and Purchasing Departments' Environmental Management System and describes the mechanisms for achieving these objectives.

4.2.3 Format

The format of this manual is designed so that each section correlates to an area of activity as defined by the ISO 14001 Standard. A master list of documentation is held by the Environmental Services Team .

4.2.4 Control


The key Environmental Procedures for Queen's are referenced in this manual. Any reference made herein to other documents implies its latest revision, unless otherwise stated.

This manual is controlled by the **Documentation and Control of Documents Procedure** Ref **GEP008**. All requests for changes applied to this manual other than type/format changes must be authorised by the Environmental Services Team .

4.2.5 Revisions

The Environmental Manual is subject to review once per year or when necessary, following the formal management review of the Management System. Should there be major changes to University's policies, organisation or responsibilities during the year, the appropriate sections of the Manual will be revised at that time by amendments issued under the established document control procedure.

4.3 Environmental Policy

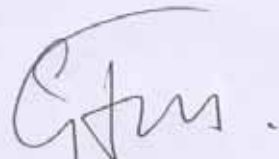


Environmental Policy Statement Estates Department and Purchasing Office


The Queen's University of Belfast recognises that environmental issues are fundamental to the future health and well-being of those involved in our institution, the greater community and our planet. Thus, the Estates Department and Purchasing Office seek to understand the impacts of our activities on the environment at local, regional and global levels, to minimise these impacts and to find sustainable solutions to environmental concerns. The University accepts the responsibility of demonstrating leadership in environmental protection and enhancement through our actions as an institution.

In support of these principles, the Estates Department and Purchasing Office are committed to:

- Promoting the protection of the natural and cultural environment on campus and at other sites used by the University
- Continually improving both Departments' environmental performance through the introduction of an Environmental Management System, which conforms to the requirements of the ISO14001 Environmental Management Systems Standard
- Complying with all the relevant environmental legislation and other requirements related to each Department's activities
- Reducing and where possible preventing pollution through the development of effective resource procurement and waste management strategies
- Monitoring and auditing the Estates Department and Purchasing Office's environmental performance and practice at regular intervals
- Increasing awareness of environmental responsibilities among staff and suppliers
- Making this Policy available to the public



Gary Jebb
Director of Estates



W Norman Bennett
Director of Finance

4.4 Planning

An important aspect of the Estates and Purchasing Departments' Environmental Management System (EMS) is planning to help ensure that its ongoing environmental programmes are consistent with the Estates and Purchasing Departments' Environmental Procedures .

4.4.1 Environmental Aspects

All environmental aspects both direct and indirect of the Estates and Purchasing Departments' activities are documented in the **Environmental Aspects Register**, Ref **GER002**.

Consideration of aspects likely to arise as a result of normal operating activities and potential emergency situations are also included.

The Register is updated in accordance with the **Procedure for the Identification and Evaluation of Environmental Aspects** Ref: **GEP002**.

The evaluation of environmental impacts associated with these aspects is considered under the following criteria:

Environmental Concerns include:

- Severity of the Impact
- Frequency of the Impact
- Likelihood of control loss

Business Concerns include:

- Potential Regulatory and Legal Exposure
- Effect on the Public image of the Organisation
- Cost of changing the Impact

4.4.2 Legal & Other Environmental Requirements

The University has a **Register of Environmental Legislation** Ref **GER001** which is maintained by the Environmental Services Team.

The Register is regularly reviewed and up-dated where necessary to meet changing circumstances.

Legal and other environmental requirements are considered when setting and monitoring Environmental Objectives, Targets and Management Programmes. New requirements are incorporated into control procedures and environmental audits as appropriate.

4.4.3 Objectives, Targets and Programmes

The University is committed to complying with all relevant regulatory requirements. It has developed a series of environmental objectives, targets and Management Programmes, which are set up for aspects related to the Estates and Purchasing Departments' environmental impacts which have been deemed significant during their evaluation.

Key environmental objectives and targets are identified and managed in accordance with the procedure **Setting and Monitoring of Environmental Objectives, Targets and Management Programmes** Ref: **GEP004**. These objectives are derived from a review of the **Environmental Aspects Register**, Ref **GER002**. The objectives, targets and associated Management Programmes are set out in the **Register of Environmental Objectives, Targets and Management Programmes**, Ref **GER003**.

The Estates and Purchasing Departments' have established a programme for implementing the University's Environmental Policy and achieving the Environmental Objectives and Targets through the Environmental Management Programmes. Each programme specifies the objectives and targets to be achieved, responsibility for the implementation and the means and time frame by which they are to be achieved.

4.5 Implementation & Operation

4.5.1 Resources, Roles, Responsibility & Authority

In organising for an effective Environmental Management System, one of the principles is that all the Estates and Purchasing Departments' Staff have individual roles and responsibilities for applying the Environmental Management System and the Environmental Policy during their time at the University. Management shall provide resources essential to the implementation and control of the Environmental Management System. Some specific responsibilities are outlined below.

The Vice Chancellor has ultimate responsibility for:

- Environmental and Health & Safety Management at Queen's

The Director of Estates has the responsibility for:

- Effective implementation of the Environmental Management System.
- Ensuring that adequate resources and specialised skills, essential to the implementation and control of the Environmental Management System is available to maintain the Environmental Management System at its required level.
- Chairing the environmental management review meetings

The Environmental Manager has the responsibility for:

- Minimising environmental impacts such as waste
- Ensuring that responsibility for environmental integrity is suitably documented
- Updating Senior Management on the performance of the Environmental Management System, and as a basis for improvement Management Systems
- Participating in the Environmental evaluation of new projects, new equipment or refurbishments within the Estates and Purchasing Departments

- Ensuring the Environmental Management System requirements are established, implemented and maintained in accordance with the ISO 14001 Standard
- Ensuring that adequate records are maintained and updated for demonstration for conformance to Management System requirements
- Updating relevant personnel on new and impending environmental legislation and its requirements
- Ensuring that all reported environmental incidents/non-conformances are investigated and corrective actions implemented in accordance with the Management System requirements
- Dealing with external regulatory bodies in matters relating to the environment
- Co-ordinating internal audits of the Environmental Management System to ensure continued adherence to documented requirements
- Monitoring environmental impacts of new projects and changes
- Ensuring that progress on objectives and targets is reported to the Environmental Management Review Group
- Control and documentation of all movements of non-hazardous and hazardous waste from the Estates and Purchasing Departments

The Heads of Purchasing, Estates Services, Estates Development and Estates Planning have responsibility and authority for:

Ensuring all activities within their areas are completed with minimal impact on the environmental and in compliance with legislation

The Management Review Team consisting of any of the following representatives:

- Director of Estates (Chair)
- Deputy Director of Estates
- Head of Estates Services
- Head of Estates Development
- Head of Estates Planning
- Head of Purchasing
- Environmental Manager

have responsibility for:

overseeing the maintenance, continual improvement and review of the Environmental Management System

The Environmental Manager is the appointed Management Representative

4.5.2 Competence, Training and Awareness

Staff within the Estates and Purchasing Departments, who perform tasks which may cause environmental impacts, shall be competent on the basis of appropriate education, training and/ or experience.

Extensive environmental awareness training shall be carried out through various communication methods.

Awareness of the environment is reinforced to Staff and Students by means of periodic posters, e-mail messages, newsletters, Estates and Purchasing websites etc.

All records of training provided, shall be held by the Staff Training and Development Unit.

4.5.3 Communication

The **Environmental Communications Procedure**, Ref: **GEP007**, specifies the method by which the University receives, documents and responds to communications both internal and external related to environmental management from relevant interested parties.

4.5.4 Documentation

4.5.4.1 General

The Environmental Management System is adequately and systematically documented by means of the following core elements:

- The **Environmental Manual**, ref **GEM001**
- EMS Procedures/ Environmental Operational Control Procedures
- The **Register of Environmental Legislation**, ref **GER001**
- The **Environmental Aspects Register**, ref **GER002**
- The **Register of Environmental Objectives, Targets and Management Programmes**, ref **GER003**

The Environmental Manual provides an overview of the Management System within the Estates and Purchasing Departments.

The Register of Environmental Aspects details all aspects and significant environmental impacts, both direct and indirect of activities and services within the Estates and Purchasing Departments. It is updated by means of the '**Procedure for the Identification and Evaluation of Environmental Aspects**', Ref: **GEP002**.

The Environmental Management System conforms with all relevant NI legislation, which is incorporated in the **Register of Environmental Legislation**, ref **GER001**. The Register of Environmental Legislation is updated periodically by the Environmental Services Team in accordance with the **Environmental legal and other requirements procedure**, ref **GEP003**.

4.5.4.2 Document Register

An index of the system documentation, Environmental **Management System Document Control Procedure Index**, reference **GER004**, is maintained by the Environmental Services Team.

4.5.4.3 Document Revision

All changes and revisions to documents must be carried out in accordance with the **Documentation and Control of Documents Procedure** Ref: **GEP008**.

4.5.5 Control of Documents

4.5.5.1 General

This manual is an integral part of Estates and Purchasing Departments' Environmental Management System. This manual describes the procedures for operating and maintaining the Estates and Purchasing Departments' Environmental Management System.

4.5.5.2 Changes and additions

Changes and additions can be suggested to the Environmental Services Team by all Staff and Students of the University. All final changes must be carried out by the Environmental Services Team via the documentation control system using the Environmental Document Control Authorisation Form. Ref: **Documentation and Control of Documents Procedure, GEP008**.

4.5.5.3 Document Review

All the procedures referenced to in this manual have been approved by management and express the Environmental Policy endorsed by the Vice Chancellor. Procedures will be periodically reviewed and revised as necessary, and will be approved for adequacy by authorised personnel.

4.5.5.4 Document Revision History

The revision history of all documents is available on the **Register of Document Revision**, ref **GER005**.

4.5.5.5 Document Numbering

There are four different types of document. These are;

GEM***	Environmental Manual- this is a summary of the entire Environmental Management System
GEP***	Environmental Procedure – these procedures are directly related to the clauses of the ISO14001 Standard and detail how the management system in place satisfies the requirements of each of those clauses
GEOP***	Environmental Operational Control Procedure – these procedures are in place to control and reduce environmental risk in areas/ operations which could have an impact on the environment
GER***	Environmental Record- these records demonstrate both compliance with the relevant environmental legislation and meeting the requirements of the ISO14001 Standard.

4.5.6 Operational Control

4.5.6.1 General

In line with the Environmental Policy the Estates and Purchasing Departments have identified activities within the University that can have/ could have a significant impact on the environment, ref **Register of Environmental Aspects GER002**. All significant impacts should be managed by means of operational control, Ref: **GEP009, Environmental Operational Control Procedure** i.e. documented in a procedure.

4.5.6.2 Other

Documented procedures are in existence, which encompass the Estates and Purchasing Departments' activities, which significantly affect or have the potential to significantly affect the environment.

4.5.7 Emergency Preparedness and Response

The Estates and Purchasing Departments have established procedures to identify potential for and response to accidents and emergency situations. They are as follows:

4.5.7.1 General

Emergency Preparedness and Response Procedure, Ref: **GEP010**, (relating to emergencies, incidents and accidents) documents details of the Estates and Purchasing Departments' response to situations involving actual or potential damage to the environment.

4.6 Checking and Corrective Action

4.6.1 Monitoring and Measurement

Documented procedures are in existence, which encompass all of the Estates and Purchasing Departments monitoring and measurement activities and processes, which significantly affect or have the potential to significantly affect the environment.

Where appropriate, monitoring equipment shall be calibrated and maintained and records of this process shall be retained according to calibration procedures.

The University is committed to carrying out regular internal audits to evaluate compliance with relevant environmental legislation and the environmental management system. Ref. **GEP015, Internal Environmental Audit Procedure**.

4.6.2 Evaluation of Compliance

The Environmental Services Team will periodically carry out compliance audits of the requirements set out in the Register of Environmental Legislation. In addition, compliance audits shall also be carried out when an incident occurs where an apparent/ potential breach of environmental legislation has taken place. Compliance audits shall be completed in accordance with **Procedure for the Evaluation of Legal Compliance**, Ref **GEP012**

4.6.3 Non-Conformity, Corrective and Preventive Action

Any member of University Staff may bring to the attention of the Environmental Services Team a potential non-conformance situation (as defined in the procedure referenced below). It is the responsibility of the Environmental Services Team to initiate an investigation and raise a non-conformance report and associated corrective action (if deemed necessary) with any issues relating to the Environmental Management System.

This will be done in accordance with the **Non-Conformity, Corrective and Preventive Action Procedure** Ref: **GEP013**

Actual and potential non-conformances will be reviewed at the Management Review Meetings.

The Environmental Services Team will record and implement any changes in the documented environmental procedures as a result of corrective and preventive actions, in line with the University's commitment to continual improvement.

4.6.4 Records

Procedures shall be established for the identification, maintenance and disposition of environmental records to demonstrate the effective operation of the environmental management system. These shall include training records, audit/ assessment results, legal documentation (waste transfer notes, licences etc.) and reviews.

Records shall be legible, identifiable and traceable to the activity or service involved. Records shall be kept for a minimum period to demonstrate conformance to the requirements of both the Environmental Management System and the relevant environmental legislation.

All records shall be maintained in accordance with the **Environmental Records Procedure**, Ref **GEP014**

4.6.5 Internal Environmental Management System Audit

Audit programmes are in place to ensure that periodic Environmental Management System audits are undertaken to ascertain if the system conforms to the ISO 14001 standard and that it is properly implemented and maintained. Audit findings shall be reported to the Environmental Services Team, who in turn shall inform the members of the Management Review Group.

All audits shall be completed in accordance with the **Internal Environmental Management System Audit Procedure**, Ref **GEP015**

4.7 Management Review

Top management shall periodically review the Environmental Management System at pre determined intervals to ensure its continuing suitability, adequacy and effectiveness. The review shall address the possible need for changes to policy, objectives and other elements of the management system in light of audit findings, a review of non-conformances and a summary of changes in circumstances. The review will assess the University's commitment to continual improvement & environmental performance. Review findings shall be documented and recorded.

This review is to be documented and carried out in accordance with the **Management Review Procedure** Ref: **GEP016**.