

Audit of Environmental Impacts

Introduction

An assessment of LSBU's environmental impacts and assessments was carried out in April 2013 by the Sustainability Manager, in consultation with the appropriate Faculties and Departments. This assessment gives details of how the environmental aspects and impacts of the activities of London South Bank University are identified and how their significance is assessed.

An **Environmental Aspect** is an element of the organisation's activities that can interact with the environment.

An **Environmental Impact** is any change to the environment, whether adverse or beneficial, wholly or partially resulting from the organisation's environmental aspects

LSBU maintains a register listing the significant environmental aspects of its operations and services. The aspects assessment considers:

1. All emissions to air, water and land from operations and activities
2. The production, storage and disposal of waste
3. The use of energy and natural resources
4. Noise and vibration
5. The supply, storage and handling of materials
6. Visual amenity and heritage factors
7. Impacts on the natural environment
8. The impacts of suppliers and contractors
9. The process inputs and outputs of the site operations
10. The results of previous assessments
11. Other issues (e.g. land ownership and management, visual aspects, potential emergency conditions, etc.) which may be considered relevant by the Sustainability Team

The scoring and therefore significance of the aspect/impact was rated as follows:

Aspect associated with legal requirements (A)

- 0 = None
- 1 = Impending legislation
- 2 = Legal guide or code of practice
- 3 = Legal requirement

Aspect of concern to stakeholders (B)

- 0 = No interest
- 1 = Little interest
- 2 = Modest interest
- 3 = Considerable interest

Likelihood or frequency (C)

- 0 = Almost never
- 1 = Sometimes (every few months/annually)
- 2 = Often (every week)
- 3 = Always

Relative size (compared to other impacts in the same category) (D)

- 0 = Insignificant
- 1 = Small
- 2 = Medium
- 3 = Large

Local severity (hazardousness) (E)

- 0 = No detriment
- 1 = Limited detriment
- 2 = Probable detriment
- 3 = Known damage to the environment

Global severity (hazardousness) (F)

- 0 = No detriment
- 1 = Limited detriment
- 2 = Probable detriment
- 3 = Known damage to the environment

The significance rating for each recorded aspect was calculated as follows:

$$\text{Significance} = (A \times 2) + B + C + D + E + F$$

An aspect is considered significant if it is rated 13 or above.

All significant aspects identified via this process should be appropriately managed, reduced and monitored, e.g. via improvement/investigative objectives and/or operational control measures.

Additional assessments may be carried out:

- When amendments to legislation, codes of practice or standards make it necessary
- When operations and activities are changed or when new projects are planned which may alter the organisation's interactions with the environment
- When the occurrence of accidents or incidents, or other factors, suggest that existing assessments may be wrong

Process or activity	Environmental aspect	Environmental impact	Significance score	Control or improvement objective(s)
Heating space in buildings using gas fired boilers	On site generation of CO2 emitted to atmosphere	Climate Change	15	Carbon reduction projects and behaviour change campaigns in place.
Use of electricity in heating, cooling and powering buildings	Off-site generation of CO2 emitted to atmosphere from grid electricity use	Climate Change	13	Carbon reduction projects and behaviour change campaigns in place.
Operation of restaurant, refectories and bakery school	Production of food waste which is then sent to landfill	Release of landfill gas (LFG) which is mainly methane and CO2 causing climate change	15	Introduction of food composting on site. Waste oil recycled into biodiesel.
Operation of Engineering and Electrical workshops	Generation of hazardous chemical waste which is disposed of through licensed contractor	Possible emission of pollutants to the atmosphere	15	Hazardous waste procedure addressed with close working between faculty and Sustainability Team to ensure maintenance of legal compliance.
Operation of woodworking classrooms	Production of dust and use of solvents, preservatives and paints	Local air pollution - potential for health impacts if inhaled	16	Extraction devices maintained by contractors to ensure suitability.
Operation of microbiological laboratories	Production of hazardous plastic materials which are sterilised before landfill	Landfill after sterilisation	13	Relevant staff members aware of roles and responsibilities.
Operation of restaurant, refectories and bakery school	Production of oils, greases and detergents	Organic water borne residues requiring treatment by water company	15	Food waste and oil are recycled reducing impact to waterways; campaigns to raise awareness of and reduce food waste on campus.
Refurbishment of buildings – asbestos removal where appropriate	Handling and removal of asbestos waste	Health impacts if inhaled	15	Asbestos is dealt with through contractors who help LSBU maintain legislative compliance.