NQA MANAGEMENT SYSTEMS
ISO14001:2004 STAGE 2 PROCESS
& ECO-CAMPUS PLATINUM
AUDIT REPORT

Client’s Name                  University College London
Address                        Gower Street, London
Post Code                      WC1E 6BT
Visit No.                      444391

Date of Opening Meeting       26/06/2017

This report has been prepared by:
   Martin Little
   Regional Assessor
   Tel: 07974 014 167
   Email: martin.little@nqa.com
   Web: www.nqa.com

   NQA
   Warwick House
   Houghton Hall Park
   Houghton Regis
   Dunstable
   Bedfordshire
   LU5 5ZX

If there are inaccuracies, errors or queries regarding this report or audit findings, please contact NQA Head Office on 08700 135145 within 5-working days of the closing meeting.
Audit Report Part A – Executive Summary

Client’s E-Mail          e.landy@ucl.ac.uk

Relevant Standard(s)    ISO 14001:2004, EcoCampus - Platinum

Number of Employees (fte within scope)  11,000  Visit Duration (in days)  5.0  Certificate VUD  N/A

This visit was satisfactory, registration is recommended. Minor NCs and OFIs have been raised. The Scope of certification remains appropriate: yes

Confirmation that audit objectives have been fulfilled: yes - all objectives met

The following action should be taken by the client: CAPs to be sent to caps@nqa.com within 10 working days and Minor NCs actioned in a timely manner.

<table>
<thead>
<tr>
<th>NQA Audit Team</th>
<th>Client</th>
<th>Position</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Assessor</td>
<td>Martin Little</td>
<td>Evan Landy</td>
<td>Opening and Closing</td>
</tr>
<tr>
<td>Assessor</td>
<td>Sandra Loxley</td>
<td>Tony Overbury</td>
<td>Opening and Closing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Richard Jackson</td>
<td>Opening and Closing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sian Minett</td>
<td>Opening and Closing</td>
</tr>
</tbody>
</table>

Note: The client is reminded that the NQA Regulations Relating to Registration can be found on the NQA website: www.nqa.com/regs

Details of Changes:

<table>
<thead>
<tr>
<th>Type of action or change required</th>
<th>Action required</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Name Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change of Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Employees Change</td>
<td>✔</td>
<td>Headcount = 14,000</td>
</tr>
<tr>
<td>Major NCs Raised</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Visit Recommended</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Executive Summary

The following shall be included:

- A description of the organisation, its context, leadership and commitment
- Positive observations and details of improvements noted
- Brief details of any nonconformities, particularly any trends detected
- Whether the controls in respect of the processes sampled are appropriate for the associated risks and opportunities
- A conclusion as to the conformity & overall effectiveness of the management system; the capability of the management system to meet applicable requirements and expected outcomes; the internal audit and management review process

The team at University College London are thanked for their open & friendly approach to this audit.

### Scope of Certification

- The provision of further and higher education, research and support services for the university.

This scope excludes all Student Union activities.

University College London incorporates in excess of 230 buildings, spread across central London & other locations around the UK.

The organisation currently has approximately 11,000 employees & provides higher education & research to approximately 39,000 students per annum.

Both of these figures have increased year on year.

The Campus within central London is not a traditional Campus & a wide variety of buildings are spread across the inner city. This provides unique challenges to the management team & to ensure success the University works very closely with Camden Council & its neighbours.

The University is currently in the process of significant development to the tune of £1.25 Billion.

The primary environmental impacts of the University are:

- Use of Fuels
- Public Engagement Events
- Curriculum of Teaching
- Purchase of Services
- Purchase of Goods
- Recyclable Materials
- Laboratory Emissions to Air
- Laboratory Effluent
- Use of Fuel/Oils
- Gas Usage
- Electricity Usage

As a result of this audit 2 Minor NC's have been identified, along with 9 OFI's.

For each Minor NC the organisation is required to complete Root Cause Analysis & to implement effective, systemic corrective actions, in order to prevent recurrence & to apply lessons learnt to similar processes as deemed applicable.

We will require the completion of a Non-Conformance Corrective Action Submission Form for each NC.
Could you then please supply a copy of this complete form to 'caps@nqa.com' within 10 working days from the end of the onsite audit? Each form will then be reviewed & if the identified corrective actions seem sufficient a recommendation for certification will be made.

No conflict of interest exists between the Auditor(s) and the client, and there is no situation known to them that presents themselves, or NQA, with a potential conflict of interest in respect to the audit undertaken.

<table>
<thead>
<tr>
<th>Major NCs</th>
<th>Minor NCs</th>
<th>OFIs</th>
<th>AoCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>9</td>
<td>0</td>
</tr>
</tbody>
</table>
## Audit Findings

<table>
<thead>
<tr>
<th>Ref No.</th>
<th>Clause No.</th>
<th>Details of finding(s) raised. Reference documents, records, etc. as applicable</th>
<th>Type (Major NC, Minor NC, OFI or AoC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.3.1</td>
<td>The organisation could usefully review the Aspects Register relating to Pest Control under Nuisance &amp; Noise &amp; consider Fire under Emergency Circumstances.</td>
<td>OFI</td>
</tr>
<tr>
<td>2</td>
<td>4.4.5</td>
<td>The Estates Incident Procedure could usefully be made available via the Intranet.</td>
<td>OFI</td>
</tr>
<tr>
<td>3</td>
<td>4.4.6</td>
<td>Following on from Corrective Action the organisation could potentially introduce routine inspections for the new Bund &amp; Storage Tanks at MSSL. Similar inspections could also be introduced for other tanks &amp; bunds as the organisation sees fit.</td>
<td>OFI</td>
</tr>
<tr>
<td>4</td>
<td>4.5.3</td>
<td>There is no evidence available for the closure of the 2 Minor NC's from the MRC Building Audit in July 2014. These NC's were raised prior to the full implementation of the ESMS. It could prove useful to review Actions taken to address these NC's in order to avoid future incidents.</td>
<td>OFI</td>
</tr>
<tr>
<td>5</td>
<td>4.4.5</td>
<td>The organisation could usefully ensure that data relating to environmental improvements &amp; environmental measures is readily available, i.e. Window Replacement at Christopher Ingold Building - Business Case.</td>
<td>OFI</td>
</tr>
<tr>
<td>6</td>
<td>4.5.4</td>
<td>Maintenance records for routine servicing &amp; inspection of the Boilers &amp; Steam Generators in the Energy Centre of the Egyptology Building were not available during the audit. Also records relating to actions taken, in response to the organisation's Tree Survey (28-6-2016), for Trees 01404, 01406 &amp; 01945 + mandatory communications with Camden Council were not available at the time of audit.</td>
<td>Minor NC</td>
</tr>
<tr>
<td>7</td>
<td>4.4.2</td>
<td>At the time of audit it was noted the no Training Records were available for Mr. P. Cresswell - Contractor. Mr. Cresswell works as sub-contractor, on behalf of Severn Trent Services, performing chemical analysis of Boilers &amp; Cooling Towers.</td>
<td>Minor NC</td>
</tr>
<tr>
<td>8</td>
<td>4.5.3</td>
<td>The organisation could usefully ensure that suitable notes are added to the Zeta Safe Database to detail high readings from the Cooling Towers, along with an explanation of root cause if known &amp; preventative actions to prevent recurrence. Timely actions have been taken &amp; measures brought into control in a timely manner.</td>
<td>OFI</td>
</tr>
<tr>
<td>9</td>
<td>4.4.7</td>
<td>It would benefit the company to review a process when a member of staff is absent to ensure the flushing of the eyewash takes place as per UCL requirements.</td>
<td>OFI</td>
</tr>
</tbody>
</table>
Note: The organisation is reminded that the audit is based upon a sampling process of available information. Non-conformity may exist outside of the audit samples reviewed.

### Close out for Findings from Previous Visit

<table>
<thead>
<tr>
<th>No.</th>
<th>Section</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>4.4.6</td>
<td>It would benefit UCL to review their COSHH MSDS data and Assessments with regards to new CLP requirements and environmental impact.</td>
<td>OFI</td>
</tr>
<tr>
<td>11</td>
<td>4.3.2</td>
<td>With ESOS compliance now coming under the University’s remit during 2019, it would benefit UCL so consider certification ISO 50001 as this only requires a couple of additional areas to 14001 and would achieve automatic ESOS compliance.</td>
<td>OFI</td>
</tr>
</tbody>
</table>

Minor NC1 - Training Needs Evaluation has been completed by Job Role. The Training Matrix has been reviewed for Catering Teams, Management Review Committee, Cleaners & Air Conditioning Engineers. This NC is considered closed.

Minor NC2 -WSP have been used to externally review the Legal & Other Requirements Register for compliance. The Register is reviewed annually by the University's consultant. This NC is considered closed.

Minor NC3 - O&G manage the waste process for UCL and this has been addressed and closed during the audit.

Hazardous waste consignment notes were signed by a representative of the university as seen during the audit; this has been addressed since the stage 1. Further plans in place to review the ‘waste round’ to have 2 or 3 back up stages for signing. The duty of care was evidenced.

The Hazardous waste consignment notes for chemical waste was in litres and seen as correct unit of measure for the type of waste removed. Detailed lists attached with the consignment notes were seen as well-controlled waste management. This NC is considered closed.
Details of processes and activities seen, persons met or interviewed, documented information viewed, etc.

Opening / Closing Meetings:
Opening and closing meetings were performed in accordance with NQA Form 335. The objective of the audit was to confirm that the management system had been established and implemented in accordance with the requirements of the audit standard.

Process / Audit Area: Management Responsibility
Auditees: Mrs Sian Minett (Director Estates, Portfolio & Business Services), Mr. Richard Jackson (Director for Sustainability)
Process Owner: Provost, Directors
Inputs: Organisation Planning
Outputs: Policies, Goals, Objectives, ESMS, Resources, Roles & Responsibilities
Objectives & Measures: Reduce Energy & Water Consumption, Reduce Carbon Footprint, 0 Waste to Landfill
Auditor (if applicable): M. Little

Evidence to support audit conclusions:
Policy - Environmental Sustainability Policy 2016 (Signed by the Provost on 7-7-2016). Reviewed annually. First established in 2011.

Vision Statement:
- Improve the sustainability of the UCL estate & its use (Currently = 230 buildings)
- Enable & support UCL staff & students, through action, to address UCL's environmental impacts
- Contribute through critical discourse, research & study, towards UCL’s distinctive approach to global environmental challenges
- Seek to continuously improve its environmental & sustainability performance

Aims & Objectives:
- To create a campus which supports UCL's academic, research & enterprise activities in a sustainable way.
- To enable, empower & support all UCL communities to address our environmental sustainability impacts.
- To provide the education, advancement, dissemination & application of sustainable development.
- To maximise the wider impact of UCL's environmental sustainability activities at local, regional, national & international level through collaboration, partnership & communications
- To become a leader across the HE sector in terms of environmental sustainability

Goals:
- Prevent Pollution - 0 Incidents
- Comply with Legal & Other Requirements - 100% Compliance
- Reduce Carbon Emissions - 15% by 2020
- Reduce Water Use - Over previous years
Audit Report Part A – Executive Summary

- Minimise Waste generation & optimise sustainable procurement - 0 Waste to Landfill & Increase Recycling Volumes over previous years
- Sustainably develop its estate - Sustainability Action Plan + BREEAM & SKA Projects.
- Reduce the impacts of travel & transport - Travel Plan
- Contribute to local biodiversity - Biodiversity Action Plan
- Promote sustainable practices & improve awareness

UCL Strategy = 2034 (Drafted in 2014) - High Level document over reaching the entire organisation.

Supported by the Environmental Sustainability Strategy for UCL = OK.

Principal Themes:
- Academic Leadership
- Integration of research & education
- Global challenges
- Accessible & publicly engaged
- London’s Global University
- Delivering global impact

Themes are delivered via the Environmental Sustainability Strategy. This has been reviewed for 2015 to 2016 & YTD:

- Total Energy Usage (MWh) + 2.3% increase.
- Total Carbon Emissions - 2.8%.
- Energy Consumption per FTE (kWh) - 7.1%.
- Carbon Emissions per FTE -11.7%.
- Energy Consumption per M² -5.5%.
- Carbon Emissions per M² -10.1%.
- YTD - 1.1% Carbon Reduction.
- Waste Recycled 2014 to 2015 = 56% (Balance is Waste to Energy) & 2015 to 2016 = 65%.
- 0 Waste to Landfill = OK.
- Water Consumption - Volume Increasing Year on Year due to increases in Students, Staff & Sites. No Factoring has been applied to these figures.

Management Review = Oct. 2016. This review covers status of the ESMS, Actions from the EcoCampus Gold Audit, Preparation for the EcoCampus Platinum/ISO14001 Audit.

UCL Sustainability Annual Report reviewed for 2015 to 2016. This review covers the Investment Programme for the University, Case Studies, Performance Results for the Year (Team Performance, Awards, Energy Savings, Transport Reductions, Carbon Savings, BREEAM & SKA Projects completed).


Estates Projects are controlled via individual Projects.
Conclusion of the Overall Effectiveness of the Process:
This process was found to be compliant.
# Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area:</th>
<th>Environmental Sustainability Management System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees:</td>
<td>Mr. E. Landy - EHS Officer, Sustainability &amp; Safety</td>
</tr>
<tr>
<td>Process Owner:</td>
<td>Mr. E. Landy</td>
</tr>
<tr>
<td>Inputs:</td>
<td>Organisational Requirements, Legal Requirements, ISO14001 Standard</td>
</tr>
<tr>
<td>Outputs:</td>
<td>Documented ESMS</td>
</tr>
<tr>
<td>Objectives &amp; Measures:</td>
<td>Compliant Management System</td>
</tr>
<tr>
<td>Auditor (if applicable):</td>
<td>M. Little</td>
</tr>
</tbody>
</table>

**Evidence to support audit conclusions:**

- Environmental Sustainability Policy - 7-7-2016 = OK.
- Environmental Sustainability Management System Manual - Vers. 5.0 (25-6-2017).
- Environmental Sustainability Strategy = OK.
- Environmental Aspects & Impacts Identification Procedure 4.3.1.1 - Vers. 5.0 (20-6-2017).
- Identifying Legal & Other Requirements Procedure 4.3.2.1 - Vers. 5.0 (20-6-2017).
- Environmental Sustainability Programme - Objectives, Targets, Commitments & Measures Procedure - Vers. 5.0 (20-6-2017).
- Governance, Accountability & Responsibility Procedure 4.4.1.1 - Vers. 3.0 (10-1-2016).
- Competence, Training & Awareness 4.4.1.2 - Vers. 5.0 (20-6-2017).
- Internal & External Environmental Sustainability Communications Procedure 4.4.1.4 - Vers. 3.0 (15-6-2017).
- Document Management & Control of Records 4.4.5.1 - Vers. 2.0 (10-1-2016).
- Emergency Preparedness & Response Plan (Inc. Incident Investigation Procedure) 4.4.7.1 - Vers. 2.0 (10-1-2016).
- Performance Monitoring, Measurement, Evaluation & Reporting Procedure 4.5.1.1 - Vers. 1.0 (20-6-2017).
- Evaluation of Environmental Sustainability Compliance Procedure 4.5.2.1 - Vers. 1.0 (20-6-2017).
- Non-Conformance, Corrective & Preventive Action Procedure 4.5.3.1 - Vers. 1.0 (10-5-2017).
- Environmental Sustainability Auditing Procedure 4.5.4.1 - Vers. 1.0 (20-6-2017).
- Environmental Sustainability Audit Schedule 4.5.4.2 - Vers. 1.0 (1-6-2017).
- ESME Responsible Procedure 4.4.6.1 - Vers. 1.0 (31-5-2017).
- Energy Management Procedure 4.4.6.4 - Vers. 2.0 (11-1-2016).
- Managing Laboratory Discharges to Drains 4.4.6.3 - Vers. 1.0 (16-6-2017).
- Water Management Procedure 4.4.6.6 - Vers. 2.0 (12-1-2016).
### UCL Sustainable Building Standard SBS 2016 - Parts 1-3, Vers. 1.8.

**Biodiversity Strategy & Action Plan**

**Conclusion of the Overall Effectiveness of the Process:**

This process was found to be compliant.
Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area:</th>
<th>Competence, Training, Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees:</td>
<td>Ms. Hannah Biggs</td>
</tr>
<tr>
<td>Process Owner:</td>
<td>Head of HR</td>
</tr>
<tr>
<td>Inputs:</td>
<td>Training &amp; Communication Needs</td>
</tr>
<tr>
<td>Outputs:</td>
<td>Trained, Competent, Awareness Staff &amp; Students</td>
</tr>
<tr>
<td>Objectives &amp; Measures:</td>
<td>Training Needs Met</td>
</tr>
<tr>
<td>Auditor (if applicable):</td>
<td>M. Little</td>
</tr>
</tbody>
</table>

Evidence to support audit conclusions:

Student Environmental Sustainability Induction Presentation = OK.

Moodle Intranet Site - Everyone has access.

Introduction to Environmental at UCL - Green Awareness. Certificates reviewed for Lisa Richardson, Sanjay Parekh & Ingrid Ophelia.

Student Switch Off Training. 47 Ambassadors Trained.

Campaign Report reviewed from 2015-2016.

Each Department has a Green Champion. Champions must complete IEMA Training. Records reviewed for Abdilla Alfath, Tania Rekha Alim & Angelos Angelidis.

Students Audit their Green Champions - 27 Students trained in 2017, total = 70 in circulation.

Awards are given as part of the Annual UCL Sustainability Awards. Awards reviewed from 2015 to 2016. This year’s has not been awarded yet.

New Environmental Legislation Awareness Training presentation = OK.

Roles & Responsibilities Table + Contact Details.

Knowledge defined by Job Role.

Training Needs Evaluation has been completed by Job Role. The Training Matrix has been reviewed for Catering Teams, Management Review Committee, Cleaners & Air Conditioning Engineers.

Internal Communication is achieved via the Universities Sustainability Website. The ESMS is available to all Students & Staff members via the Intranet.

Social Media - Twitter & Facebook.

Monthly Newsletters - June’s Staff Newsletter & May’s Student Newsletter.

WARPit - Student site for reusing unwanted items (like Ebay).

UCL News via the Website.

Big Easter Switch Off Event - 393,000 kWh saved & 132 tonnes of CO2 not produced.

Degrees of Change - Energy/CO2 Saving Educational Tool.
Green Impact Tool - Bronze, Silver, Gold Awards. Staff Audits to make departments greener.

Training Records reviewed:
- Training Records reviewed by working processes. Please see records below.

External Communications reviewed:
- Diesel Spillage at MSSL - EA contacted & they are happy with actions taken. Site visit completed (Please see the Corrective Action section below).
- No Compliance Assessments completed by the EA.

Conclusion of the Overall Effectiveness of the Process:
This process was found to be compliant.
Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area:</th>
<th>Environmental Aspects &amp; Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees:</td>
<td>Mr. E. Landy, Mr. T. Overbury</td>
</tr>
<tr>
<td>Process Owner:</td>
<td>ESMS Manager</td>
</tr>
<tr>
<td>Inputs:</td>
<td>Identified Environmental Aspects</td>
</tr>
<tr>
<td>Outputs:</td>
<td>Aspects, Impacts Register,</td>
</tr>
<tr>
<td></td>
<td>Operational Controls,</td>
</tr>
<tr>
<td></td>
<td>Emergency Preparedness &amp;</td>
</tr>
<tr>
<td></td>
<td>Response Plans</td>
</tr>
<tr>
<td>Objectives &amp; Measures:</td>
<td>No Environmental Incidents</td>
</tr>
<tr>
<td>Auditor (if applicable):</td>
<td>M. Little</td>
</tr>
</tbody>
</table>

**Evidence to support audit conclusions:**

Procedure 4.3.1.1 Environmental Aspects & Impacts Identification (Vers. 5.0, 20-6-2017).

**Significant Aspects:**

- Use of Fuels
- Public Engagement Events
- Curriculum of Teaching
- Purchase of Services
- Purchase of Goods
- Recyclable Materials
- Laboratory Emissions to Air
- Laboratory Effluent
- Use of Fuel/Oils
- Gas Usage
- Electricity Usage

**Environmental Objectives linked to Significant Aspects:**

- Energy & Water Consumption Reduction.
- Carbon Reduction.
- 0 Waste to Landfill.
- BREEAM & SKA Projects.
- Increase Volumes of Waste Recycled (Balance to Waste to Energy).

**Conclusion of the Overall Effectiveness of the Process:**

The Aspects Register could usefully capture Pest Control under Nuisance & Noise & consider Fire under Emergency Circumstances.
<table>
<thead>
<tr>
<th>Process / Audit Area:</th>
<th>Legal &amp; Other Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees:</td>
<td>Mr. E. Landy, Mr. T. Overbury</td>
</tr>
<tr>
<td>Process Owner:</td>
<td>ESMS Manager</td>
</tr>
<tr>
<td>Inputs:</td>
<td>Applicable Legal &amp; Other Requirements</td>
</tr>
<tr>
<td>Outputs:</td>
<td>Legal &amp; Other Requirements Identified &amp; Incorporated into Processes</td>
</tr>
<tr>
<td>Objectives &amp; Measures:</td>
<td>100% Compliance</td>
</tr>
<tr>
<td>Auditor (if applicable):</td>
<td>M. Little</td>
</tr>
</tbody>
</table>

**Evidence to support audit conclusions:**

- Legal Register Reviewed = OK.
- Register reviewed by WSP (External) = OK.
- Legal Register is reviewed Annually by Mr. T. Overbury + Cedrec updates.
- Permits, Licenses & Exemptions reviewed via the EA's Public Register. There are too many to list in this report.
  - Abstraction License = 1.
  - Radioactivity Permits = 17.
  - Waste Exemption S1 - WEX097427 (Exp. 1-6-2020).
- Controls to Permit Conditions sampled via Operational Controls (Please see Below).

The organisation did not fall within the remit of ESOS at Phase 1 (Greater than 50% Government Funding). The organisation will fall under ESOS at Phase 2 & are aware of the deadlines of 31-12-2018 & 5-12-2019.

**Conclusion of the Overall Effectiveness of the Process:**

This process was found to be compliant.
Audit Report Part A – Executive Summary

Process / Audit Area: Corrective/Preventive Actions
Auditees: Mr. T. Overbury, Mr. S. Lockhart
Process Owner: Departmental Managers
Inputs: Identified Non-Conformance, Poor Performance, Opportunity for Improvement
Outputs: Compliance, Improvement, Lessons Learnt
Objectives & Measures: 0 Incidents
Auditor (if applicable): M. Little

Evidence to support audit conclusions:

Incidents are all recorded in RiskNet by the relevant Departmental Manager.

Reviewed for the Estates Department.

Estates Incident Procedure - Not available at the time of audit.

Monthly Estates Tracker reviewed from May 2016 to May 2017 reviewed.

ELT Incident Log is reviewed on a Weekly basis at the BAU (Business as Usual) Meeting - Attended by a representative from each part of Estates. Management Team in attendance.

Agenda reviewed.

Estates 13 Months Performance - Customer Complaints = 99, Incidents = 359 (Not many of these are Environmental Incidents).

Categories = Hazardous, Complaints, Floods, Leaks, Accidents.

Records reviewed:

- I1/186 - Leak in the Boiler Room - Repaired by Kier.
- I1/189 - Asbestos Works - Signage in the area identified Asbestos. Work had been carried out in the area. It was confirmed that the area had been cleared of Asbestos prior to the works being conducted.
- I1/192 - Contractor had conducted work in an area containing Asbestos without permission. General mess left after work. Contractor warned & mess cleared up.
- I1/214 - Uranium Compound disposal. Staff Member retrained in the correct protocol for Radioactive Waste disposal.
- I1/228 - Scalpels incorrectly disposed of in Clinical Waste Bin. Tool Box Talk given to cleaning staff regarding the correct method of disposal.
Conclusion of the Overall Effectiveness of the Process:

Estates Incident Procedure not available at the time of audit.

Potentially routine inspections for the new Bund & Storage Tanks at MSSL could be introduced.
## Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area:</th>
<th>Internal Audit, Evaluation of Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees:</td>
<td>Mr. R. Lukos, Mr. T. Overbury</td>
</tr>
<tr>
<td>Process Owner:</td>
<td>Audit Programme Manager</td>
</tr>
<tr>
<td>Inputs:</td>
<td>Standard &amp; EMS Requirements, Legal &amp; Other Requirements</td>
</tr>
<tr>
<td>Outputs:</td>
<td>Compliance, Improvement</td>
</tr>
<tr>
<td>Objectives &amp; Measures:</td>
<td>Audits completed as planned &amp; Actions taken in a timely manner</td>
</tr>
<tr>
<td>Auditor (if applicable):</td>
<td>M. Little</td>
</tr>
</tbody>
</table>

### Evidence to support audit conclusions:

- **Procedure 4.5.4.1 - Environmental Sustainability Auditing (Vers. 1.0, 20-6-2017).**
- **Procedure 4.5.2.1 - Evaluation of Environmental Sustainability Compliance (Vers. 1.0, 20-6-2017).**

Evaluation of Compliance Audits are completed on an Annual basis.

The Legal & Other Requirements Register is also reviewed Annually to ensure it is up to date with the latest requirements.

An Annual Audit Programme is compiled. Schedule reviewed 2016/2017.

Audit Reports reviewed:

- **New Student Centre (Construction) - 12-6-2017, Auditor = Mr. Richard Lukos.** Contractor Controls reviewed for Mace. No Findings.
- **Waste (Hazardous) - Evaluation of Compliance Audit - 5-6-2017, Auditor = Mr. T. Overbury.** Findings = 8 Minor NC's & 9 OFI's. Actions are open.
- **F-Gas - Evaluation of Compliance Audit - 6-6-2017, Auditor = Mr. T. Overbury.** Findings = 2 Minor NC's & 1 OFI. Actions are open.
- **MRC Building - 15-7-2014, Auditor = Ms. Stephanie Chesters,** Findings = 2 Minor NC's.

Internal Auditor Training Programme - 7 Auditors Trained. 3 Day Internal Auditor Training Course provided, followed by the performance of an actual Audit.

### Conclusion of the Overall Effectiveness of the Process:

There is no evidence available for the closure of the 2 Minor NC's from the MRC Building Audit in July 2014. These NC's were raised prior to the full implementation of the ESMS. It could prove useful to review Actions taken to address these NC's in order to avoid future incidents.
Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area:</th>
<th>Operational Controls - Estates &amp; Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auditees:</strong></td>
<td>Mr. B. Sampson, Mr. C. Jebb, Mr. R. Green</td>
</tr>
<tr>
<td><strong>Process Owner:</strong></td>
<td>Director for Facilities &amp; Infra-Structure &amp; Director for Sustainability</td>
</tr>
<tr>
<td><strong>Inputs:</strong></td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td><strong>Outputs:</strong></td>
<td>Operational Control, Compliance, Improvement</td>
</tr>
<tr>
<td><strong>Objectives &amp; Measures:</strong></td>
<td>0 Incidents, Reduce Energy Consumption</td>
</tr>
<tr>
<td><strong>Auditor (if applicable):</strong></td>
<td>M. Little</td>
</tr>
</tbody>
</table>

**Evidence to support audit conclusions:**

- UCL Estates Intranet Page - Heating, Cooling, Ventilation Policy - Vers. 0.1, 1-8-2016. Temperature ranges throughout the year for the activation of heating & cooling.
- UCL Travel Plan - Feb. 2015. Promotes Cycling to the University. Increase the use of Video & Voice Conferencing (Meeting Rooms have facilities installed). Establish a Media Lab for International Video/Voice Conferencing at the Here East development (Refurbishment Project). Additional 100 Bike Parking Spaces & 100 Lockers installed at Bloomsbury Campus (Completed + Additional).
- Re-Wilding Bloomsbury Project - London Wildlife Trust + Kings College London = Ongoing.

**Programmes & Performance:**

- KPI 6 - Environmental Sustainability - Score - 100%

**i-Audit Findings:**

- Chenies Mews - Waste Collections - Contractors arriving early, outside of agreement with Camden Council - Grundons are the Contractor. Grundons have been contacted regarding respecting the time restrictions on waste collections.
- Waste from Smokers & Fly Tipping - Resolved.
- 21-2-2017 - Cleaning Audit at Torrington Place.


**Sustainability Projects - Lighting Improvements. DMS Watson - Science Library. Lights replaced with LEDS’s. 18% Energy Reduction achieved.**

**All Windows replaced at the Christopher Ingold Chemistry Building. Energy Saving measure as improved heat retention.**

**Facilities Management Operational Controls - Egyptology Centre - Energy Centre:**

- Maintenance is managed via the Famis System but this is soon to be transferred to the Planet system.

- Boiler Servicing = Not Available.
Steam Generator Servicing + Thorough Examination = Not Available.
Internal Energy Centre Log Checks reviewed from 18-6-2017 = OK. Remedial work completed by Finnings on 2-6-2017. All Hazardous Waste produced is processed by the University via their Brokers - O & G & Mitie = OK. Flue Gas Analyser Calibration completed in June 2017, still waiting for Calibration Certificates to be provided.

Conclusion of the Overall Effectiveness of the Process:
OFI - Make data relating to environmental improvements & environmental measures readily available, i.e. Window Replacement at Christopher Ingold Building.
Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area:</th>
<th>Operational Controls - Grounds &amp; Soft Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees:</td>
<td>Mr. I. Wright, Mr. R. Jackson</td>
</tr>
<tr>
<td>Process Owner:</td>
<td>Mr. I. Wright</td>
</tr>
<tr>
<td>Outputs:</td>
<td>Compliance, Grounds &amp; Soft Services provided to Specification, Customer Satisfaction</td>
</tr>
<tr>
<td>Objectives &amp; Measures:</td>
<td>Compliance to Biodiversity Action Plan, Compliance to Service Specifications, 0 Use of Chemical Treatment, Minimise Water Usage, Chemical Usage for Cleaning, Water &amp; Energy Management</td>
</tr>
<tr>
<td>Auditor (if applicable):</td>
<td>M. Little</td>
</tr>
</tbody>
</table>

**Evidence to support audit conclusions:**

0 Incidents in the last 12 Months.

Operational Controls for Grounds - Front Quadrant:

- Grass Areas, Planters, Low Shrubs, Trees.
- Contractor used to manage this area - UCL Contractor = O & G, Sub-Contractor = DW Landscaping.
- Tree Survey & Maintenance - Salcey (Managed by O & G).
- Landscaping Service Specification = OK.
- Tree Survey - 28-6-2016 (Salcey Group). 59 Trees Surveyed. No Tree Preservation Orders, but Camden Council are consulted before any works are completed. Priority 1 Trees identified & sampled No's 01404, 01406 & 01945 = Not Available
- New Build - 27-6-2017 - Installation of complete planting - 1 Bay Tree & 6 Bamboo + Watering.
- Contractor = Planteria - Grounds Maintenance Schedule, Schedule of Plant Displays (20 Bedford Way & John Adams Hall) + Frequency of Inspections = OK.
- Watering as required. Minimal usage of Weed Killers & Pesticides.
- No Invasive Species identified.

Operational Controls for Soft Services - Catering via Sodexo:

- Sustainable Food Policy = OK
- Quarterly Catering Sustainability Report reviewed from March 2017
- Waste Management - Cooking Oil (Processed via Sodexo), Animal By-Products, Food Waste & Packaging (These are processed via UCL's arrangements).
- Training Records - Ms. H. Mandangu = OK

**Conclusion of the Overall Effectiveness of the Process:**

Tree Records & Council Communications not available.
## Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area:</th>
<th>Operational Controls - Water Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees:</td>
<td>Mr. P. Julien (Building Services Engineer), Mr. M. Lawrence (Maintenance Team Leader), Mr. Zared Coburn (Arctic AC Engineer), Mr. Keith Kerridge (Building Services Engineer)</td>
</tr>
<tr>
<td>Process Owner:</td>
<td>Head of Engineering</td>
</tr>
<tr>
<td>Inputs:</td>
<td>Aspects Analysis, Policies, Sustainability Action Plan, Legal Requirements</td>
</tr>
<tr>
<td>Outputs:</td>
<td>Compliance, Customer Satisfaction</td>
</tr>
<tr>
<td>Objectives &amp; Measures:</td>
<td>0 Incidents, Water Consumption Reduction</td>
</tr>
<tr>
<td>Auditor (if applicable):</td>
<td>M. Little</td>
</tr>
</tbody>
</table>

### Evidence to support audit conclusions:

- Estates Monthly Dashboard - May 2017 reviewed. Red actions are reviewed, actions taken & reviewed again at the next monthly meeting = OK.
- Water Hygiene - Control of Legionella - Water Risk Assessments.
- Single Contractor used to complete temperature testing & sampling = Severn Trent Services
- Zeta Safe - Database.
- Cooling Towers x 2 - Roberts Building, Torrington Place - Camden Council Registration = OK.

**Scheme of Works are scheduled via the Zeta Safe system. Controls sampled:**

- Schedule of Works reviewed from Jan. 2017 to Dec. 2018. The vast majority of planned works are completed. 2% of Planned Works not completed as planned, typically due to access issues.
- Training Records reviewed for Mr. P. Cresswell - No Records available (Boiler Chemistry & Cooling Tower Chemistry) = Not Available.
- Training Records reviewed for Mr. P. Spittle - Legionella & Disinfection - C & G.
- Temperature Testing - Reviewed for May & June 2017. Majority of testing completed. The majority that weren’t completed are for outlets no longer in use.
- Training Records for Water Temperature Testing reviewed for Mr. G. Jenkins = OK.
- Control of Legionella Standard - Jan. 2014. SOP’s - 6-4-2016.

- Borehole - Bidborough House - Abstraction License - TH/039/0039/064 (Exp. 31-3-2019). Required for a Ground Source Heat Pump.
- Return Form reviewed from 1-4-2016 to 31-3-2017 = OK.

**F-Gas Operational Controls:**

- Controls reviewed for A/C Units in the Data Centre TP1 - Torrington Place.
Audit Report Part A – Executive Summary


Arctic REFCOM = REF1011366 = OK

F-Gas Log sampled for Building 17.

- Refrigerant Log reviewed for Units EQ010057 & 58 (Chillers) & EQ018707 (Condensing Unit) = OK.
- Condensing Unit = R407C - 1.3kg (June 2016).
- Chillers = 15-4-2017 - Engineer = Mr. F. Neville - Training Records = C & G F-Gas & ODS.

Conclusion of the Overall Effectiveness of the Process:

Training Records reviewed for Mr. P. Cresswell - No Records available. Records requested at Monthly Water Services Monthly meetings. Mr. Cresswell is always accompanied by a representative from Severn Trent Services, due to Lone Working requirements. Various STS Representatives attending site.
# Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area:</th>
<th>Operational Control - Sustainable Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees:</td>
<td>Mr. B. Stubbs</td>
</tr>
<tr>
<td>Process Owner:</td>
<td>Sustainability Manager</td>
</tr>
<tr>
<td>Inputs:</td>
<td>Aspects Analysis, Policies, Sustainability Action Plan, BREEAM/SKA Requirements, Legal Requirements</td>
</tr>
<tr>
<td>Outputs:</td>
<td>Efficient, Sustainable Buildings</td>
</tr>
<tr>
<td>Objectives &amp; Measures:</td>
<td>Reduce Energy Consumption, Reduce Carbon Footprint, BREEAM/SKA Ranking</td>
</tr>
<tr>
<td>Auditor (if applicable):</td>
<td>M. Little</td>
</tr>
</tbody>
</table>

## Evidence to support audit conclusions:
- Objective = Sustainable development of our estate.
- UCL 2034 Strategy - Key Enablers = Sustainable Estate.
- Sustainable Building Standard (SBS) - Project Planner (Follows the RIBA Stages - Stage Gate Approvals).
- Linked to the Carbon Management Plan - Cost & Carbon Tool developed (Excel Spreadsheet).
- Sustainability Code of Practice for Contractor.
- Mini-SKA Tool developed.
- BREEAM for Big Projects.
- SKA for Smaller Projects.
- Mini SKA for even Smaller Projects.

### 22 Gordon Street Process Controls reviewed:
- 22 Gordon Street (Bartlett School of Architecture) - Major New Build, technically a Refurbishment of an existing Building. Slab & Structure only retained.
- BREEAM Project = Excellent.
- Contractor = Gilbert Ash - Code of Conduct should be return along with the Contractor’s Tender Documents (See Procurement Section).
- Information for Contractors Web Site gives access to lots of UCL documents.
- Tracker Plus Portal is used for BREEAM Projects,
- BREEAM Scoring = OK.
- SC Project Tracker reviewed 7-6-2017 - Reviewed by Management on a monthly basis.
- Sustainability Statement - Vers. 00.
- Thermal Survey - Feb. 2017
- Euston Road Travel Plan
- 22 Gordon St. Site Specific Travel Plan
- Drawings controlled via the Tracker + Portal
- Energy & Carbon - Cost of Carbon Tool
BREEAM Tracking Document
Post Occupancy Assessment - On-going.
No Ecology Constraints. Biodiversity improved.

Conclusion of the Overall Effectiveness of the Process:
This process was found to be compliant.
Process / Audit Area; Institute of Archaeology – Operational Controls  
Auditees; Tom Gregory, SEM Manager, Evan Landy  
Inputs; ESMS ad Company Requirements  
Outputs; As below  
Objectives and Measures; Operational controls for the EMS working effectively  
Auditor (if applicable) Sandra Loxley  

Evidence to support conclusion;  
Evan accompanied me on the site tour, initially stopping at Archaeology, and spoke with Tom Gregory who gave me a tour around the tour, within the remit of labs on this site is seen: SEM Lab, Sample preparation lab and furnace laboratory, isotope preparation lab. Sedimentology lab and the Ancient DNA lab which has specific controlled entry requirements.

Tom stated that there is a long term environmental project that is running. A lot of old equipment has gone, The Estates department has put in sound cladding in the room and Tom stated this resulted in a reduction of sound of 5db from the pump room, previously quite noisy.

Evan stated how Estate’s work on projects they will look at the energy team and review the best options. An X-ray cabinet was bought in from another room, now all the analytical equipment in seen in one space, this has resulted in more energy efficiency. Live energy data was stated could be seen on the Carbon system. The baseline was efficient when the monitoring in this started.

The energy baseline was stated to be stable. Previously the AC was running at 16 degrees now it runs at 21 degrees with a similar energy usage, proving much more efficient equipment now in place.

DEC Certificate no 9870-1000-0767-0790-5125 showed a rating of C – 67

Waste management showed Clinical waste and paper waste, some paper was seen in the clinical waste bin this has been picked up in audits and being addressed, the paper bin was not marked and a similar top to the other bin marked up could help.

The preparation lab, resins and ethanol. Rolling programs of inspections in the labs. The works towards Platinum was said to have encourage behaviour change, notices to switch off equipment, lighting after use.

Tom showed me where there was a recent spillage of ethanol. The bottle was put quickly back in the cupboard and broke spilling liquid inside the locked container, another person saw the liquid leaking onto the floor. Spillage pads were used to mop it up and disposed of, the record was not seen this audit.
Good controls were seen for waste IMS/acetone:

It would benefit the company to review the process when a member of staff is away to ensure the flushing of the eyewash takes place as per UCL requirements.

**Opportunity for Improvement**

Buehler Release Agent Article Number 20-8185-xxx seen to contain symbols ‘Harmful’ ‘Flammable’ and Dangerous to the environment and the Epo thin resin (as below) correct symbols seen on cabinets.

Other areas of COSHH were not seen across the audit; therefore this is raised as an OFI to review across UCL.

It would benefit UCL to review their COSHH MSDS data and Assessments with regards to new CLP requirements and environmental impact.

**Opportunity for Improvement**
Conclusion of the overall effectiveness of the conclusion;

The processes within the Labs of the Institute of Archaeology were seen to be working well, a couple of opportunities for improvement were identified and staff were made aware of the findings.
## Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area;</th>
<th>Core Process – Institute of Psychology &amp; Language Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees;</td>
<td>John Draper</td>
</tr>
<tr>
<td>Process Owner;</td>
<td>John Draper</td>
</tr>
<tr>
<td>Inputs;</td>
<td>EMS and Operational controls /Communications / Raising awareness</td>
</tr>
<tr>
<td>Outputs;</td>
<td>As below.</td>
</tr>
<tr>
<td>Objectives and Measures;</td>
<td>Involvement of Students and the message growing across UCL</td>
</tr>
<tr>
<td>Auditor (if applicable)</td>
<td>Sandra Loxley</td>
</tr>
</tbody>
</table>

### Evidence to support conclusion;

John stated the Institute of Psychology and Language Studies building is in one of the largest 6 buildings of UCL.

Every year there is a Green Day in an Environmental theme, some of which were:

- Green footsteps to the stairs – fun photo seen of this on the notice board outside John’s office.
- Seed planting get compost and bring people in, they made a video about this.
- Book Swaps

John sits on the Steering Group and the communication seen to be well received.

Biodiversity walks and days where there are some engagement pieces included; bird walks where around 50 people turned up. They engage with 40,000 students and have discussions on what works and what doesn’t in some departments, most departments have a green champion, which are seen later in the report. The School of pharmacy partly involved not yet fully involved, Martin Farley consultant is working with them and they formed a couple of laboratory green impacts.

Reporting Who has submitted for Green impact lead by Professor Graeme Hart. Heads of Department feed into him, he feeds into Vice Provost and SLMS. They stated there is good upwards feedback, with the relaunch of the #carbon management plan, they get feedback from other professional services staff.

Green Impact team – The Excellence Project – have completed 6 initiatives this year, they sent out a survey about vegetarian food and whether more amendable to having, Now more vegetarian food in the cafeteria and this was evidenced during the tour of this area. Currently encouraging divestment from fossil fuels to engage in and this is in the process of being finalised.

Green impact; Bronze, Silver and Platinum. John stated this started 5 or 6 years ago, exceeded and this was incentivised then got academics and this was encouraging to see this evolving.
The Green Impact Workbooks were shown and each building is working through them.

Twitter Hashtag
Commitments were seen framed and on Twitter, to vegetarian for a year, John committed to walk in for a year and so far 3 months achieved. Selfie pledge and photo with picture frames seen. 1. Pledge to walk to work for a year. 2. Pledge to take the stairs till April. 3. Other Pledges seen on the twitter
Green Impact Live Version - NUS

- 0001 Biodiversity & Community
- Encouraging students to look after plants or outside of department, big boxes for plants, encouraged painting, photos of painted pots seen.
- Bug Hotel
- CH Garden – each floor plant pots painted different colours on each floor
- Next year looking to bring in competition between the buildings.

other areas, where evidence was gathered involved;
- Communication & Governance,
- Construction
- Curriculum
- Energy
- Procurement.

This is seen to ensuring key EMS communications getting through to all Departments and a growing awareness of green impact procedures, there is an email link to sustainability course.

Proactively made use of Carbon culture, can access Cedric for environmental legislation, carry out walk arounds to identify environmental impacts and bring things to people’s attention, open window, bins, other areas, people generally don’t see these in their day to day activities.

Competition to Make the best Work of Art out of Junk or something useful out of Junk and this inspired students and this was the Green review.

Conclusion of the overall effectiveness of the conclusion;

This demonstrates the operational controls and communications and raising awareness through the UCL continue to develop. This process is seen working satisfactorily.
Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area;</th>
<th>Core Process – Degrees of Change / Carbon Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees;</td>
<td>Cairan Jebb – Assistant Sustainability Manager (Energy)</td>
</tr>
<tr>
<td>Process Owner;</td>
<td>Joanna Marshall Cook</td>
</tr>
<tr>
<td>Inputs;</td>
<td>Legislative requirements/ UCL Requirements</td>
</tr>
<tr>
<td>Outputs;</td>
<td>Initiatives / records to support</td>
</tr>
<tr>
<td>Objectives and Measures;</td>
<td>Carbon management / Online tool for Degrees of Change effective for feedback</td>
</tr>
<tr>
<td>Auditor (if applicable)</td>
<td>Sandra Loxley</td>
</tr>
</tbody>
</table>

Evidence to support conclusion;

Degrees of Change

A plan to reduce UCL’s carbon emissions across its campus, teaching and research. 2016 – 2020
This is in the process of getting approval for a wider participation with students, degrees of change workshop
any challenges and ideas that can be bought to them.

An Online tool, Degrees of Change gave Students a budget over several areas, giving options where they would
spend their money,
- Installing Green Roofs
- Changing where energy ought for
- Insulating the building
- Switching off lights
- Ensure out labs are used more efficiently encouraging people to dress more appropriately for seasons
- Carbon impact of flying
- Purchasing better
- Community effort – set level of engagement of peers.
- Final figure shows how much spent on intervention and how much carbon saved.

Cairan stated that a lot of feedback was received on this they were surprised by little saving from solar panels, it
bought home to people form unseen interventions. Trends were fed into the strategic vision for carbon
management.

Empowering the UCL Community to make sustainable choices
- Communications – behavioural changes
- Creating a well-maintained State - sustainable lighting. Big project in replacing bulbs with LED lights a
  busy area in the Wilkins building the Cloisters.
- Supplying low-carbon energy to UCL – project for Solar Panels, Cost reduced, improved efficiency and
  feeding tariff has reduced, looking at longer term benefit. Looking at longer term generator and in
  collaboration and looking to set up deal with Wind Farm or similar to enable them to build that and
  working towards this.
- Buying better and sharing what we have – encouraging from Sites and Project side can we take old
  furniture from one area and use in another rather than buying two. Bought some teak from a theatre
  and being used and some gone to Art school potentially new benches. Make better use of centralised
resources, big project to centralise fridges and freezers and looking to clear out what they don’t need. Also looking to create storage off site where samples are not used still monitored and controlled, this frees up space in the lab and storage.

Mid 2017 currently on target for 15T reduction and then will be on track for 2020 target.

Due to the increases with staff and personnel,

FTE Count from student registry and FTE basis and equivalent, currently at 44, gone up 50% from baseline
Changes to funding regime, and cap changed in 2012 reflecting increased numbers. UCL Continues to be a popular university to go to.

UCL’s Carbon Targets
- 2020 - 15%
- 2034 – 50%
- 2050 – Aligned with UK Targets 80%

Energy more towards wind and sun away from gas and oil.
This was approved last year, has given 2015/16 figures to show progress towards the 15%

Ciaran stated other areas include.
Emissions Training Scheme – reducing and charging for emissions. ETS scheme is on Gas and Oil, UCL main campus site is a ETS designated zone. Every kWh of gas burnt is measured and recorded and from that is calculated how much carbon emitted, and building data is submitted externally audited and confirms energy consumed and carbon emitted, allowances are bought based on this. £11,200 tonnes this year, biggest drop this year not running the CHP engines all year.

ETS Compliance
Plan of Energy Centres – Drawing
Shaded buildings are UCL buildings.
Red line creates the boundary that UTS applies
Green and blue dots are meters that are monitored and read.

**CRC - Carbon Reduction Commitment Scheme**
Everything else is CRC
All this data is submitted to the EA, Tonnage Carbon from the figure £16.17 per tonne more expensive. April to March.

DEC’s were evidenced as follows:
UCL 26 Bedford Way Certificate 9896-1089-0132-0200-6405 B 26-50 <44

Bidborough House, 38-50 Bidborough Street, WC1H 9BT Certificate 0660-0016-2489-7420-1092, D 76-100 <100
Conclusion of the overall effectiveness of the conclusion;

This process was seen to be working satisfactorily.
### Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area;</th>
<th>Operational Controls - Waste Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees;</td>
<td>Gary Stratmann, Facilities Services Manager, Tony Overbury – Sustainability Consultant Ben Stubs – Sustainability Manager</td>
</tr>
<tr>
<td>Process Owner;</td>
<td>Gary Stratmann</td>
</tr>
<tr>
<td>Inputs;</td>
<td>Operational Controls, Legislative and Statutory</td>
</tr>
<tr>
<td>Outputs;</td>
<td>Transfer notes, Consignment Notes,</td>
</tr>
<tr>
<td>Objectives and Measures;</td>
<td>Waste effectively managed</td>
</tr>
<tr>
<td>Auditor (if applicable)</td>
<td>Sandra Loxley</td>
</tr>
</tbody>
</table>

**Evidence to support conclusion;**

Gary Stratmann stated that waste streams are considered in two sections which are managed differently,

- Non Hazardous managed through O&G and Bywaters are the main contractor.
- Confidential waste, Hazardous waste, clinical, offensive, radiological waste managed with Mitie.
- Clinical and Offensive waste with Grundon’s
- Chemical etc., with TRABEDE.

At point of generation waste placed as seen

- Dry Recycling – clear bags
- Residual Waste – Blue bags
- Food – Orange bags

The bags are semi-transparent so it’s possible to see what’s in it.

Bags are collected by cleaning team and moved to consolidated waste areas which are serviced on a daily basis. Bywaters in Bow stated to have a solar panel array on the roof with the intention to become energy efficient. Residual waste goes through Leyton MRF to pick out. Food waste is collected separately, economically depending on usage and this is consolidated into 1100 bins.

Initiative through O&G and Bywaters with disposable coffee cups, there has been large accumulations recently. Bywaters have created a waste steam for this and currently being trialled on 6 sites, there is a plant in Wales and UCL are looking at the journey and carbon footprint to decide whether it is viable.

There is a focus on cups and re-usable cups have been given out as incentives.

Looking at WarPit, like ‘Ebay’, usable material listed on this, a subscription database, can advertise within the university, to friends and to the third sector. Energy use inputting items on almost a threshold. Lab Coats have been listed in this way.

Re-purposing working with O&G Bywaters and Premier Sustain purchasing furniture and a couple of projects with desks reductions, desks with returns cut down.

Agile working across site, occupancy monitored in the past.
Audit Report Part A – Executive Summary

Working with Ben and Sustainability – Comm’s piece, through Green Champion initiatives. Green UCL website and waste section on here.

- Materials and Recycling
- Use the Right Bin
- USE UCL’s signage
- Sign up and use Warpit
- Initiatives – Bloomsbury theatre teak acoustic slats all the way around, repurposed terrace, lecture theatre. Sample panels taken and making a 1.2M bench potentially made this afternoon.

£1.2Billion programme for transforming UCL. SWMP, BREAM excellence for new builds. Ben has oversite of these projects, now visibility, pushing reduce the number of bins on site. Repurpose, Reuse and reduction. Gary stated very difficult to see moving Hazardous clinical to offensive still transferred in a secure way saving.

Centralised bins all bins removed from desks resulting in cleaners have more time to clean floors, and more focus on cleaning.

HESA website – all universities, green score card, waste figures.
Recycling rate is 60% so comparison with other universities working towards 85% (this was based on what they thought could be achieved, failed to take into account was behaviour and perceptions)

Soft Services Tender starting now January next year, once the contract has been appointed they are working with them to come up with innovations and working to engaging their understanding.

Largest part of clinical and offensive steams – Yellow bags, sharps bins, sealed. Contaminated glass 60l burn bins. Transferred to external bins 70L pala bins, some smaller with space constraint. Filled bins taken to a collection point exchanged with an empty bin. Cleaners trained in the process and only to collect sealed bins. Incineration for clinical, Offensive yellow bag with a black stripe. Collected on the same round Kowle Hill near Marlow facility by Grundon. Biggest source offensive animal vein, central BSU, put in a system for taking the bedding cages being tipped out and bag sealed. Successful model to be used for new builds or refurbs.

Pre-acceptance audits of sites, Mitie carry out these inspections, with observations and recommendations. Energy from Waste or Incinerator. Biggest initiative to stop throwing waste into hazardous waste, through lab sustainability and estates team, improved communications, investigations providing more information, through speaking finding one blocker safety, lab staff can get to point of ‘risk averse’, this year one recommendation of Tony’s work with Tony and Ben looking at an E-learning programme.

Gary is starting to present a business case for Waste Diversion. Clinical Waste tonnage differential £10 per Tonne working with Sustainability Team for this. Looking to Trial with Bernard Catz building.

Chemical waste – bulk generally solvents, lab smalls seen on request. Radiological waste collected by departments, collected by Radiation Protection Team, Trabede collect from Gary and he signs this off.
## Waste Management

The following Waste Transfer Notes were sampled and checked:

<table>
<thead>
<tr>
<th>Carrier</th>
<th>No.</th>
<th>Date</th>
<th>Description</th>
<th>EWC Code</th>
<th>SIC Code</th>
<th>Hierarchy Statement</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradebe</td>
<td>Haz Waste</td>
<td>25/01/17</td>
<td>Non chlorinated (L) Chemical name</td>
<td>160508 160506 160507</td>
<td>85.42.12</td>
<td>In place</td>
<td>Archaeology</td>
</tr>
<tr>
<td></td>
<td>UMIVERIA0403</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tradebe</td>
<td>Dangerous Goods</td>
<td>21/12/16</td>
<td>Solid waste</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>UCL Stanmore</td>
</tr>
<tr>
<td></td>
<td>Note Transfer</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Trabede</td>
<td>Radioactive Waste</td>
<td>21/6/17</td>
<td>Organic Liquid and Solid Drum no’s detailed</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Rockefeller</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UCL Gower Street</td>
</tr>
<tr>
<td>Tradebe</td>
<td>Haz Waste</td>
<td>5/4/17</td>
<td>Diesel x 2 Solvents Lab Smalls Mixed Acids Mixed Basis</td>
<td>160508 160506 160507</td>
<td>85.42.12</td>
<td>In place</td>
<td>CB/QE553732</td>
</tr>
<tr>
<td></td>
<td>UMIVER/A1401</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Grundon</td>
<td>Haz Waste</td>
<td>19/5/17</td>
<td>H Clinical Sharps Clinical Waste – Infected Cytotoxic/Dytos tatic Pharmaceuticals</td>
<td>18 01 03 18 01 03 18 01 09</td>
<td>85.42</td>
<td>In place</td>
<td>UCL Gower Street</td>
</tr>
<tr>
<td></td>
<td>Consignment Note</td>
<td></td>
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<tr>
<td>Bywaters</td>
<td>Annual WTN</td>
<td>10/8/16</td>
<td>Glass 240litre wheeled container</td>
<td>200301</td>
<td>85.42.1</td>
<td>In place</td>
<td>Wolfson Centre (SAT)</td>
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<td></td>
<td>1/8/16 – 31/7/17</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

The EWC Codes are detailed on the above Waste Transfer / Consignment Notes.

Finding with Tradebe, Fawley, Charleston Road, Hythe Southampton, however they are not currently completing Part E Consignee’s Certificate, recorded and followed up in the internal audit. Several records seen in place, this contractor is seen as a well-managed. The driver was PP the sign off, this is now being managed. Timings are checked against staffing, this feeds into monthly auditing, premise must go to delivery point at 8am. Staff there early competent to do the signing. Gary will review the round, and ensuring that timings are right and a backup system if timings fail; there is another option to come to Gary for signoff at 8.30am. Gary would like to put in another level as well.

Tony audited compliance at Mitie and found the driver was signing document and this has been raised and discussion took place, O&G are now considered as appropriate to sign as a broker and this part closes the previous non-conformance in this area. A unit of measure is known and fully attached listing with the WTN demonstrated this, close out actions identified with the driver and the preventive action is for the broker to monitor compliance.
Audit Report Part A – Executive Summary

These actions seen to close the previous raised area of concern.

Permits for end destination
- Pulse Environmental Ltd. – Permit Number EPR/PB3037AT 22/2/13
- Grundon – Permit Ref: B17116 IW lakeside EfW Facility - Permit Number: EPR/ BT7116IW Variation V002
- Grundon – Star Works Treatment Plan. Consolidated Permit No. EPR/YP32373D - Variation V003
- Tradebe Fawley Limited – Permit Number – EPR/FP3935KL – Variation V006

Waste Carrier Registration:
Bywaters — CBDU100793 expiry April 2019
Tenon FM Ltd (O&G) – CB/PE503RL/R003 expiry 2 April 2018 O&G Rebranded in April.

Pre-Acceptance Audit  UCL Institute of Ophthalmology 6/2/17
Tony carried out an audit and suggested Gary and MITIE would benefit to carry out an audit there.
Each laboratory is audited at least every 3 years.
- This covered:
  - Audits of laboratories that produce clinical waste
  - Audits of local and central waste storage areas
  - Examination of documentation relating to clinical waste management
  - Interviews of key personnel on site
  - Observation of clinical waste disposal, handling, packaging and storage
  - Very detailed audit of all waste areas within the site
  - Recommendations under section 9 and 8 recommendations seen made.

Ronan Haughton – Programme Administrator UCL Knowledge lab
Gary did a walk around 14th June 2017 with him and was shown how waste is managed on site, full time on site and deals with goods inwards, selection of bins / signature found out they will move into the new contract sent links to the new system. Spoke to the Kingdoms soft services. Looking at better bins for labs and signage. The cleaning supervisor will be taken with Gary at the next visit.

Any queries dedicated email “greenucl” inbox then Hannah filters them. Waste goes to Gary and Ben.

Duty of Care Audit Norman Road, Belvedere Road, Belvedere. Energy to Waste Plant Cory Environmental Energy from waste plant. 3/2/17 16.23

Global Citizenship – one area environmental sustainability, showing people China who do not have a god environmental system, educating them with other measures, Students leave with the skills to improve their own country’s impact, the influence opportunity.
SEDEXO picked up ID badges take a long time, a good time to pass information to students.
### Conclusion of the overall effectiveness of the conclusion;

The waste process is seen as working satisfactorily and improvement in this area since the Stage 1, the audit process has addressed issues and actions taken to improve services.
Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area;</th>
<th>Core Process – Emergency Preparedness and Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees;</td>
<td>Emma Shirbon - Environment, Health and Safety Management System, Estates</td>
</tr>
<tr>
<td>Inputs;</td>
<td>Emergency Situations / Planning/ Maintenance – Prevention / Test</td>
</tr>
<tr>
<td>Outputs;</td>
<td>Evidence to support inputs</td>
</tr>
<tr>
<td>Objectives and Measures;</td>
<td>Emergency Preparedness and Response Achieved</td>
</tr>
<tr>
<td>Auditor (if applicable)</td>
<td>Sandra Loxley</td>
</tr>
</tbody>
</table>

Evidence to support conclusion;

Emma showed me the UCL section of the university’s home page and link to Emergency Planning below.

![UCL Emergency Planning](image)

Environmental Sustainability Procedure
The Faculty work on their Business Contingency Plans by Activity
The major incident plan was tested in February 2017. The major incident team involves Provost, Vice Provost.
Abridged version of the report was to be made available however this was not seen during the audit.
Emma stated a Lorry had crashed into one of the buildings, Roberts building, this played out how staff were managed.

Fire Alarm System is maintained by ‘FRisk’ Fire group Certificate of servicing for the fire alarm system at:
Bidborough House, 400 38-50 Bidborough Street London WC1H 9BT showed 25% of service and included battery tests for emergency lighting covered zones 5th, 6th and 7th floors. Each building has planned maintenance. This identified that relevant work was identified in the log book.

Every building has an emergency report. Fire Risk Assessments and plans seen for every building. Personal Evacuation Plans – Peeps to enable students to evacuate. Some buildings have lobby’s for students to gather others do not so a full review carried out by the fire team.
Fire Drills are planned to make minimum disruption to lectures.

SafetyNet evidenced training and tool box talks for many activities and included; Liquid Nitrogen – Safe Decanting of Liquid Nitrogen Toolbox – linked e-learning course, many other courses offered depending on the activity of the departments. Departmental Environmental Officer evolving Officer working with Safety Services

Wilson James is the contractor who manages the spill kits on site. Emma carried out an audit on Wilson James 13th June

Record of FGas; Reports to Programme Performance Team – Estates – Artic within the emergency plan under 8.2 showed Spills or leads of hazardous Gases.

Estates Website Information for Contractor and Designs; EHS Rules for Contractors are now seen under the Estates web page open to the public domain. This showed the Contractors and EHS requirements for provision of spill kits. All expectations for Sustainability seen under this. Electrical showed Emergency Lighting and electrical services isolations

Risk Net for Safety DSO’s showed a lot of Safety officers uptake and DEO only 5 listed and Hannah working with the Green Champions, Green Champions on Risk Net showed a good representation, this is a way of seeing all roles. Radiation Protection Supervisors a much bigger uptake seen here with representation of faculty as a legislative requirement. DEO Role Job service Office Role seen reviewed 22/6/17. Competency Assessment for using Spill kits reviewed 13/6/17.

Conclusion of the overall effectiveness of the conclusion;

The documentation seen at Stage 1 and reviewed and follow through to the operational controls as evidenced in some areas. The emergency preparedness was followed up with radioactive substance below. Spillage controls
were seen checked with the contractor, and spill kits seen on site. Emergency condition of Fire was sample and controls seen to be managed by the fire department.
Process / Audit Area; Radioactive Substances Management
Auditees; Gwen Mott – RPA - Radiation Protection Officer
Process Owner; Dr Mike Lockyear - RPA
Inputs; Legislative and operational controls
Outputs; As below
Objectives and Measures; Conformance to legislative and emergency preparedness and response.
Auditor (if applicable) Sandra Loxley

Evidence to support conclusion;
Gwen is an Ex EA radioactive substances inspector.
The regulations required Internal or External RPA, UCL have External Radio Protection Advisers:
  - Peter Marsdon RPA and RWA
  - Andrew Hancock RPA

Department themselves Appoint an RPS – Radioactive Protection Supervisors. Gwen stated that the UCL process by definition goes beyond regulation. There are the Local UCL rules from ordering, to monitoring to contamination – badges, training. Mostly this deals with the day to day uses.
  - Safe Handling of Unsealed Radioactive Sources
  - Most areas within Medical and Chemical
  - Paul Topham – MRC Building
  - KLB – radio chemistry lab
  - Paul O’Gorman
  - Physics

ICH and Royal Free largest source. Under normal circumstances they will admit no more than background radiation.

There is an Incident Response process that Gwen has tested with Security – Alerts will trigger a police response, Information is given to security.

Example seen of Restricted – Emergency Services Information
Information given for Alarm Response and communication of different alarms status.
Kate Thornton identified as 1st call out.
This would then be communicated to the Major Incident Team and this would then enact the Major Incident Plan.
Communications/Emergency Contact Information: AURORA 24/7 out of hours contact normal hours through RPA as detailed above.

Conclusion of the overall effectiveness of the conclusion;
The Radioactive management process is seen as working effectively, RPA External advisors, tests emergency responses with Security and experienced knowledgeable staff in this area.
Audit Report Part A – Executive Summary

<table>
<thead>
<tr>
<th>Process / Audit Area;</th>
<th>Core Process – Procurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditees;</td>
<td>Richard Lakos, Procurement Manager, Simon Lockhart</td>
</tr>
<tr>
<td>Process Owner;</td>
<td>John Faraday – Director of Procurement</td>
</tr>
<tr>
<td>Inputs;</td>
<td>Operational Requirements/Tender process</td>
</tr>
<tr>
<td>Outputs;</td>
<td>Evidence to support Procurement Process</td>
</tr>
<tr>
<td>Objectives and Measures;</td>
<td>Conformance to requirements</td>
</tr>
<tr>
<td>Auditor (if applicable)</td>
<td>Sandra Loxley</td>
</tr>
</tbody>
</table>

Evidence to support conclusion;
Estates procurement is anything over £50,000 goes through this procurement process. Before anything comes to Procurement comes for PSO this ensures its gone through the relevant stage gates, UCL status with EU has changed so don’t have to advertise, OJU, most of service contracts £164k, Construction £4.1M not advertised this way and go through a preferred list. A voluntary OJU has now released previous restrictions, Richard came from private industry.

A number of ways to acquire goods, through Tendering process, over 5 – 3 quotes, controlled by UCL processes.
- Collaborative procurement Agreement – benefits and restrictions as have to deal with heads of services
- Relationship with sustainability,
- London University Consortium
- Energy Consortium

Tony has worked with procurement team and Sustainability now in the contracts. Internal audit on Responsible Procurement Code and this was evaluated. John has revised Procurement and seen through how sustainability is in procurement. Responsible Procurement Code seen, UCL Slavery and Trafficking Statement. UCL Procurement Strategy showed under Strategic Aims seen embedding sustainability into procurement activities, key members of Sustainability team work with Procurement, sustainability is considered as part of the Tender process and spoke about furniture. Under 50K spends are monitored.

Artic – USM Reporting and UPO. The USM is a service report sheet, service, compliance, KPI’s and templates. The documentation is held on the Tender Portal, and this is monitored and accreditations, PQQ asks about membership of Construction line and this is monitored.

Example seen of Fisk Fire Group
Picture, this is submitted to their Service Manager responsible to the Contract manager this feeds in the USN contract.

At the moment the Performance Dashboard seen 6 June 2017 and Lesley working with Facilities and Simon met with her team and looked at Compliance in this area. Simon demonstrated a review of F&I Compliance. He initially met with each area and assessed compliance meeting with:
- Area FM
- DLO – Gavin Hughes
- Catering and Hospitality – Ian Wright
- Cruciform PFI – Ian Wright
Audit Report Part A – Executive Summary

- Hazardous Waste – Ian Wright
- Mail Services – Steve Shine
- Security Manned Guarding – Mark West
- Nursery – Kate Burtonshaw
- Shop – Ian Wright

This showed the areas of compliance that needed to be monitored.

Performance Compliance Monthly report seen 17/5/17
This seen to include;
Water Hygiene Management – Patrick Julian
FGas and ODS – Keith Kerridge

Joanna Marshal-Cook – Service contract programme – now bringing in Sustainability in to this. At the moment this is about asking contractors to report on Sustainability, currently not a KPI yet this will be evolved. The data is improving all the time and Simon stated this detail was not available several years ago.

Issued to Martin Earlam – Duty Holder for Legislative Compliance, Seen to cover any actions from the last meeting Seen to include a good coverage of environmental and Safety legislative compliance S1-Prison, S2 – Fines.

Interaction with Procurement and involvement with the performance team and when there are issues with supplier how these are managed, which comes back to the procurement programme, ties into the degrees of change.

Within the PQ folder, PQQ Documents, Evaluations seen under PQQ Evaluation Moderator sheets and details of every supplier scores, full audit trail of tender document, Scoresheets seen for 3 suppliers reviewed.

Programme boards are run quarterly and renewals and monitored,
USN Reporting for Performance Monitoring and this information has high Compliance
- Legislative and Contractual
- Risk – As seen for the service provided
- KPS’s for performance
- Other aspects.
- Legislative report and review session.

The Board is going to change from Service Contracts Programme Board currently Quarterly is changing to monthly and being chaired by Director of Facilities and Infrastructure
Soft Services – using a Tender process, the PQQ sent out to the market place and 5 suppliers selected,

Conclusion of the overall effectiveness of the conclusion;
The Procurement and Performance monitoring processes were seen working satisfactory together, with good collaborative working and communications between Richard and Simon.
Audit Report Part A – Executive Summary

Process / Audit Area: Document Controls and Records
Auditees: Tony Overbury
Process Owner: Estates
Inputs: Management System Requirements
Outputs: Records to evidence controls
Objectives and Measures: Document Controls managed and records in place
Auditor (if applicable): Sandra Loxley

Evidence to support conclusion:

The management system is on MOODL

![MOODL Interface](image)

The benefit is that this is shared across the university and with the ID badges and students and embedded contractors have access.

Last access to records is demonstrated with participants access to the management system
Gwen accessed 43 mins 19 seconds ago
Emma accessed 3 hours 48
Many people have accessed the management system and a history for those accessed records.
This is a controlled document, write access is granted to specific people; Emma Sherman, Evan Landy, Hannah Biggs and Tony Overbury.

Key policies are documents that inform the EMS and are hyperlinked to the UCL website and the relevant section.
Current Versions of documents seen to be controlled

4.1.1 ESMS Manual v5.0 PDF Document
4.4.6.4 ESMS Procedure Energy Management 2.0

Estates have Services Support and this is on the S Drive. Under 9.0 Sustainability which showed restricted access to Estates only. This is seen to contain the Master Documents of the management system.

Procedures seen under 9.9

- 991 Draft
- 991 Awaiting Approval
- 9.9.1.2 Undergoing Revision
- 9.9.13 Future Improvement
- 9.9.1.4 Archive or Junk
- 9.9.2 Final (in PDF document goes to MOODL as seen for management system above.
- 9.9.3 Previous versions

Going forward records they are looking at an overarching CAFM which would enable a more centralised access. Work orders generated on FAMIS. Several systems running at the moment.

**With ESOS compliance now coming under the University’s remit during 2019, it would benefit UCL so consider certification ISO 5001 as this only requires a couple of additional areas to 14001 and would achieve automatic ESOS compliance.**

**Opportunity for Improvement**

**Conclusion of the overall effectiveness of the conclusion;**

Documented information was seen controlled through the Estates process and fully accessible management system as PDF with version control well identified and managed.

Records were sampled across the audit and at times slow through the IT system yet fully evidenced during this audit.

The documented information and record process seen to be working satisfactorily.
Process / Audit Area: Use of NQA Management System Certification Marks and those of Regulators
Auditees: Mr. T. Overbury

Evidence to support your conclusions:

The NQA Logo is not in use by the organisation. This is the initial Stage 2 Audit for ISO14001:2004.

Conclusion of the Overall Effectiveness of the Process:
This process was found to be compliant.

Note: The client is reminded that our library of management system certification marks and full guidance on their use can be found on the NQA website: www.nqa.com/logos

End of Audit
# Audit Plan

This plan relates to the next Recertification (Transition) visit.


<table>
<thead>
<tr>
<th>Member / Role</th>
<th>M. Little - Lead Assessor</th>
<th>Member / Role</th>
<th>M. Little - Lead Assessor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>25-6-2018</td>
<td>Date</td>
<td>26-6-2018</td>
</tr>
<tr>
<td>Time</td>
<td>Location/Department/Function</td>
<td>Time</td>
<td>Location/Department/Function</td>
</tr>
<tr>
<td>09:45</td>
<td>Arrive on Site</td>
<td>08:45</td>
<td>Arrive on Site</td>
</tr>
<tr>
<td>10:00</td>
<td>Opening Meeting</td>
<td>09:00</td>
<td>Compliance Obligations - Legal &amp; Other. Organisational Permit/Consent/Exemption Overview Evaluation of Compliance Internal Audit</td>
</tr>
<tr>
<td>10:30</td>
<td>Review Changes to the Organisation + Findings from the last NQA Audit Report + Corrective Actions to Minor NC's</td>
<td>12:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch</td>
<td>13:00</td>
<td></td>
</tr>
<tr>
<td>13:00</td>
<td>Leadership - Interview with Senior Management - Environmental Policies, Risks &amp; Opportunities, Organisational Action Plans, Allocation of Resource, Objectives, Measured Performance Data, Improvements, Management Review</td>
<td>14:30</td>
<td></td>
</tr>
<tr>
<td>15:00</td>
<td>Environmental Aspects Analysis</td>
<td>16:00</td>
<td>Review Day 2 Findings</td>
</tr>
<tr>
<td>16:00</td>
<td>Communications, including Staff, Students &amp; Neighbours</td>
<td>16:30</td>
<td>Depart Site</td>
</tr>
<tr>
<td>17:00</td>
<td>Review Day 1 Findings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17:30</td>
<td>Depart Site</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Completed by M. Little

Timings and content may be subject to change
Audit Plan

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<th>M. Little - Lead Assessor</th>
</tr>
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<tbody>
<tr>
<td>Date</td>
<td>27-6-2018</td>
<td>Date</td>
<td>28-6-2018</td>
</tr>
<tr>
<td>Time</td>
<td>Location/Department/Function</td>
<td>Time</td>
<td>Location/Department/Function</td>
</tr>
<tr>
<td>08:45</td>
<td>Arrive on Site</td>
<td>08:45</td>
<td>Arrive on Site</td>
</tr>
<tr>
<td>09:00</td>
<td>Site Tour - Review Waste</td>
<td>09:00</td>
<td>Site Tour - Energy Centre +</td>
</tr>
<tr>
<td></td>
<td>Compounds, including Radioactive</td>
<td></td>
<td>Operational Controls &amp; Maintenance</td>
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<tr>
<td></td>
<td>Substances &amp; Waste Chemicals</td>
<td>Function</td>
<td>Activities</td>
</tr>
<tr>
<td>10:30</td>
<td>Operational Controls - Waste</td>
<td>11:00</td>
<td>Site Tour - Grounds Maintenance +</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td></td>
<td>Operational Controls</td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch</td>
<td>12:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:00</td>
<td>Site Tour - Laboratory + Permit</td>
<td>13:00</td>
<td>Site Tour - Soft Services, including</td>
</tr>
<tr>
<td></td>
<td>Conditions, Operational Controls &amp;</td>
<td></td>
<td>Cleaning &amp; Catering + Operational</td>
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<tr>
<td></td>
<td>Emergency Preparedness &amp; Response</td>
<td></td>
<td>Controls &amp; Contractor Management,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>including Training &amp; Communication</td>
</tr>
<tr>
<td>15:00</td>
<td>Operational Control - Water</td>
<td>15:00</td>
<td>Site Tour - Sustainable Construction</td>
</tr>
<tr>
<td></td>
<td>Management, including Abstraction License Review</td>
<td></td>
<td>+ Operational Controls, Emergency</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Preparedness &amp; Response, Contractor Management, Waste</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Management, Training &amp; Communication</td>
</tr>
<tr>
<td>16:00</td>
<td>Review Day 3 Findings</td>
<td>16:30</td>
<td>Review Day 4 Findings</td>
</tr>
<tr>
<td>16:30</td>
<td>Depart Site</td>
<td>17:00</td>
<td>Depart Site</td>
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</tbody>
</table>

Completed by M. Little

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Audit Plan

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<th>Member / Role</th>
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<tbody>
<tr>
<td>Date</td>
<td>29-6-2018</td>
<td>Date</td>
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<tr>
<td>Time</td>
<td>Location/Department/Function</td>
<td>Time</td>
</tr>
<tr>
<td>08:45</td>
<td>Arrive on Site</td>
<td></td>
</tr>
<tr>
<td>09:00</td>
<td>Operational Controls - F-Gas, including Contractor Controls</td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td>Operational Controls - Sustainable Procurement</td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td>Documented Information, including Control of Documents &amp; Records</td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>13:00</td>
<td>Emergency Preparedness &amp; Response - Fire Protocols</td>
<td></td>
</tr>
<tr>
<td>14:00</td>
<td>Audit Report Preparation</td>
<td></td>
</tr>
<tr>
<td>16:00</td>
<td>Closing Meeting</td>
<td></td>
</tr>
<tr>
<td>16:30</td>
<td>Depart Site</td>
<td></td>
</tr>
</tbody>
</table>

Completed by M. Little

Timings and content may be subject to change

The objectives of the audit will be:

- To confirm that the management system had been established implemented and maintained in accordance with the requirements of the audit standard.
- To evaluate the ability of the management system to ensure the client organisation meets applicable statutory, regulatory and contractual requirements. Note: A management system certification audit is not a legal compliance audit.
- To evaluate the effectiveness of the management system to ensure it is continually meeting its specified objectives.
- To identify as applicable, areas of the management system for potential improvement.

The audit scope describes the extent and boundaries of the audit, such as physical locations, organisational units, activities and processes to be audited. Where the initial or re-certification process consists of more than one audit (e.g. covering different locations), the scope of an individual audit may not cover the full certification scope, but the totality of audits shall be consistent with the scope in the certification document.

- This audit programme is to be prepared by the Lead Auditor at the completion of the Stage 2 audit or the Recertification audit. It should be replicated in all subsequent surveillance visit reports.
- Where an element(s) of the programme cannot be completed at a given visit the programme shall be amended and up-issued accordingly to ensure coverage at the following visit.
- Site visits are to be included in the programme with a clear indication as to the processes intended to be sampled.

<table>
<thead>
<tr>
<th>Type of visit</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Surveillance One</th>
<th>Surveillance Two</th>
<th>Recertification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit Due Date (MM/YY)</td>
<td>06/17</td>
<td></td>
<td></td>
<td></td>
<td>06/18</td>
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<tr>
<td>Mandatory Elements / Selected Processes</td>
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<tr>
<td>Verification of Corrective Actions from previous visit</td>
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<tr>
<td>Management System (including changes) – effectiveness in respect of the achievement of objectives &amp; intended results of the DMS</td>
<td>X</td>
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<tr>
<td>Customer Satisfaction, Complaints, Corrective Action</td>
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<td>X</td>
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<td>Internal Audit</td>
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<td>Management Review</td>
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<tr>
<td>Progress of planned activities towards continual improvement</td>
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<tr>
<td>Use of marks and references to certification/ Client website</td>
<td>X (Discussion)</td>
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<tr>
<td>All processes covered</td>
<td>(See Plan)</td>
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<td>Environmental Planning</td>
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<td>Legal &amp; Other Requirements</td>
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<td>Evaluation of Compliance</td>
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<td>Emergency Preparedness &amp; Response</td>
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<td>Document &amp; Record Controls</td>
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<tr>
<td>Site visit(s)</td>
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</table>

Audit trails will be developed based upon identified risk throughout the audit and as such timings and content may be subject to change. Where the client operates shifts, the activities that take place during shift working shall be considered when developing the audit programme.