



This document is shared for the purposes of learning legacy. It is a snapshot in time and hence many of the links within the document will become obsolete over time. Some links may refer to a document storage location that isn't accessible. Users should refer to the learning legacy website where these documents may be published separately.

SUSTAINABILITY AND CONSENTS

Á

Environmental Aspects and Impacts Register

Document Number: CR-XRL-T1-ZFO-CR001-00008

Current Document History:

| Revision | Effective Date: | Author(s) (‘Owner’ in eB *) | Reviewed by: (‘Checked by’ in eB *) | Approved by: | Reason for Issue: |
|----------|-----------------|--------------------------------|--|--------------|--|
| 3.0 | 27/02/2015 | [REDACTED] | [REDACTED] | [REDACTED] | Updated to reflect changes in CRL business and to conform to the new CRL document template structure |

This document contains proprietary information. No part of this document may be reproduced without prior written consent from the chief executive of Crossrail Ltd.

Valid only if viewed through the CRL Management System Portal on Crossrail Connect

Previous Document History:

| Revision | Prepared Date: | Author: | Reviewed by: | Approved by: | Reason for Revision |
|-----------------|-----------------------|----------------|---------------------|---------------------|----------------------------|
| 2.0 | 15-02-2012 | [REDACTED] | [REDACTED] | [REDACTED] | Update and Review |

Revision Changes:

| Revision | Status / Description of Changes |
|-----------------|--|
| 3.0 | Updated to reflect changes in CRL business |

Learning Legacy Document

Contents

1 Purpose4

2 Scope4

3 Definitions.....4

4 Responsibilities.....5

5 Procedure.....6

 5.1 Rented Property with facilities management 6

 5.2 Rented properties managed by Crossrail..... 6

6 Reference Documents*****

7 Appendix.....7

 7.1 Determining Significance 7

 7.2 Aspects and Impacts Severity 9

Learning Legacy Document

1 Purpose

The Crossrail Environment Statement identifies the Significant Aspects for the design, construction and operations of Crossrail.

The purpose of this document is to identify the aspects and impacts associated with activities outside of the Crossrail Environmental Statement

2 Scope

2.1.1 The following locations are covered within this procedure

- 25 Canada Square, Canary Wharf, London, E14 5LQ
- Liverpool St Offices 1-14 Liverpool St, London, EC2M 7NH
- Canning Town Warehouse, Unit 5 Electra Business Park, 150 Bidder Street, London E16 4ES

2.1.2 The following locations currently fall outside the remit of the Crossrail Facilities Management operations and are excluded from the scope of this procedure. The aspects and impacts will be identified and managed by the relevant facilities management employee as follows;

- Tunnelling and Underground Construction Academy (TUCA) – National Construction College Facilities Management subcontractor
- Site offices – Principal Contractor with the exception of Liverpool St office
- Estates Management Facilities Management (Total Facilities Management) – Balfour Beatty Workplace

2.1.3 Construction Activities

Crossrail programme manage and influence the aspects and impacts of construction and design through the applicable Crossrail procedures referenced in the Environment Manual under section 5.10 Operational Control.

3 Definitions

N/A

4 Responsibilities

4.1.1 Crossrail - Facilities Manager

- Liaising with and attending regular meetings with office CITI Facilities Management providers including cleaning, maintenance, and catering contractors
- Maintaining regular contact with landlord's representatives for all premises occupied by Crossrail in order to share relevant safety and environmental related information
- Liaising with TfLs Environmental Manager
- Management of Duty of Care documentation for waste and recycling activities
- Procurement of new office equipment (excluding IT equipment)
- Disposal of unwanted office furniture and equipment (excluding IT equipment)
- Procurement of office paper
- Liaising with the Sustainability & Consents Team on setting environmental objectives & targets

4.1.2 TfL Environmental Manager (Facilities Operations, Commercial) – Head Office

- Monitoring and reporting on waste management and recycling together with electricity, gas and water consumption for TfL Head Offices.

4.1.3 EMS and Performance Manager

- Updating aspects and impacts register
- Advising personnel of legislation updates
- Conduct Site Inspections
- Liaise with TfL Environment Manager/Crossrail Facilities Strategy Manager

4.1.4 CITI Facilities Management

- Management of the Waste Management Contract (25 Canada Square)

5 Procedure

The significance rating of each aspect has been determined using Appendix 7.1, Determining Significance. The aspects and impacts scoring can be found in Appendix 7.2, Aspects and Impacts Severity Scoring.

5.1 Rented Property with facilities management

5.1.1 Rented Offices

The Crossrail Team are tenants at one rented office building; 25 Canada Square, which is managed by Citibank . Therefore there is limited control in relation to utilities (waste, electricity, water and infrastructure) maintenance and management. Where possible the Crossrail Team will endeavour to influence this through Objective 04 (Waste) and 05 (Energy), & through tenant forum meetings with building owners. The potential impact is insignificant.

5.2 Rented properties managed by Crossrail

5.2.1 Warehouse

The Warehouse based at Canning Town Business Park is rented by Crossrail and the facility is managed by Crossrail Team. It is used to store archive material. The potential impact is insignificant after mitigation control measures have been implemented.

5.2.2 Liverpool St Offices

The Liverpool St Offices are leased to Crossrail Land and Property and the facility is managed by Crossrail Team of which the maintenance is contracted out to Cofely.)The potential impact is insignificant after mitigation control measures have been implemented. The aspects and impacts assessment have been combined for the warehouse and Liverpool St offices.

6 Reference Documents

| Ref: | Document Title | Document Number: |
|-------------|---|-----------------------------|
| 1. | Environmental Facilities Management Procedure | CR-XRL-Z2-GPD-CR001_Z-50016 |
| 2. | Environment Manual | CR-XRL-T1-GMN-CR001-00001 |
| 3. | Canning Town Warehouse Procedure | CR-XRL-Z2-GPD-CR001_Z-50007 |
| 4. | Estate Management Process | CR-XRL-T2-GPC-CR001-00008 |

7 Standard Forms/Templates

| Ref: | Document Title | Document Number: |
|-------------|-----------------------|-------------------------|
| A. | None | |
| B. | | |

8 Appendix

8.1 Determining Significance

8.1.1 Severity of environmental impact evaluation

| Severity Evaluation | | |
|---------------------|----------------------|--|
| Score | Significance | Description |
| 1 | Insignificant | None of the relevant parameters exist at a level that can cause potential impacts to the environment. |
| 2 | Minor | Some of the parameters exist at recognisable levels that have the potential to cause minor environmental change. |
| 3 | Moderate | The parameters of the aspect / impact all exist at recognisable levels and are / can cause environmental damage, but such damage is short term and always repairable. |
| 4 | Major | The parameters of the aspect / impact exist at a level that does or will cause environmental damage, but the damage is not permanent or is only medium term. |
| 5 | Severe | The parameters of the aspect / impact are comparatively high and combined in a manner that causes, or can cause, severe environmental damage, e.g. permanent / long term environmental damage. |

8.1.2 Likelihood of occurrence of environmental impact

| Likelihood Evaluation | | |
|-----------------------|----------------------|---------------------------|
| Score | Likelihood | Description |
| 1 | Very Unlikely | One year |
| 2 | Unlikely | Six monthly occurrence |
| 3 | Possible | Three monthly occurrence |
| 4 | Likely | Monthly occurrence |
| 5 | Very Likely | Daily – Weekly occurrence |

8.1.3 Significance Ratings Matrix (Environmental Impact * Likelihood)

| | | SEVERITY SCORES | | | | |
|-------------------|--------------------|--------------------|------------|---------------|------------|-------------------|
| | | 1 Insignificant | 2 Minor | 3 Moderate | 4 Major | 5 Catastrophic |
| LIKELIHOOD SCORES | 5 Very Likely | 5 | 10 | 15 | 20 | 25 |
| | 4 Likely | 4 | 8 | 12 | 16 | 20 |
| | 3 Possible | 3 | 6 | 9 | 12 | 15 |
| | 2 Unlikely | 2 | 4 | 6 | 8 | 10 |
| | 1 Very Unlikely | 1 | 2 | 3 | 4 | 5 |

Learning Legacy

8.2 Aspects and Impacts Severity

7.2.1 Rented Properties with Facilities Management

| Aspect | Conditions | Impacts | Pre controls | | | | Controls | Post Controls | | | | |
|-------------------------------|------------|---|--------------|-------------|--------------|----------------------|---|---------------|-------------|--------------|----------------------|---|
| | | | Severity | Probability | Impact Score | Significant (yes/no) | | Severity | Probability | Impact Score | Significant (yes/no) | |
| Ecology/Biodiversity | N | Disturbance or destruction of natural habitats | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N | |
| | A | | | 0 | 0 | N | | | 0 | 0 | N | |
| | E | | | 0 | 0 | N | | | 0 | 0 | N | |
| | N | Spread of invasive species | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N | |
| | A | | | 0 | 0 | N | | | 0 | 0 | N | |
| | E | | | 0 | 0 | N | | | 0 | 0 | N | |
| Waste Management and Disposal | N | Inefficient waste management, incorrect disposal of waste | 3 | 4 | 12 | Y | Waste segregation and correct disposal methods in place | 1 | 3 | 3 | N | |
| | A | | | 4 | 2 | 8 | | | N | 2 | 2 | N |
| | E | | | 5 | 1 | 5 | | | N | 1 | 1 | N |
| Listed building | N | Damage of protected buildings. | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N | |
| | A | | | 0 | 0 | N | | | 0 | 0 | N | |
| | E | | | 0 | 0 | N | | | 0 | 0 | N | |
| Surface and groundwater | N | Risk of pollution by run-off or direct contact | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N | |
| | A | | | 0 | 0 | N | | | 0 | 0 | N | |
| | E | | | 0 | 0 | N | | | 0 | 0 | N | |
| Land contamination | N | Pollution of land, air or water | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N | |
| | A | | | 0 | 0 | N | | | 0 | 0 | N | |
| | E | | | 0 | 0 | N | | | 0 | 0 | N | |

Valid only if viewed through the CRL Management System Portal on Crossrail Connect

Rented Properties with Facilities Management continued

| Aspect | Conditions | Impacts | Pre controls | | | | Controls | Post Controls | | | |
|--------------------------|------------|--|--------------|-------------|--------------|----------------------|--|---------------|-------------|--------------|----------------------|
| | | | Severity | Probability | Impact Score | Significant (yes/no) | | Severity | Probability | Impact Score | Significant (yes/no) |
| Noise and vibration | N | Causing noise and vibration nuisance | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N |
| | A | | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 0 | 0 | N | | | 0 | 0 | N |
| Dust and Air quality | N | Causing decreased air quality and/or dust nuisance | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N |
| | A | | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 0 | 0 | N | | | 0 | 0 | N |
| Consumption of materials | N | Depletion of natural resources | 2 | 2 | 4 | N | N/A | 2 | 2 | 4 | N |
| | A | | 3 | 2 | 6 | N | | | 2 | 4 | N |
| | E | | 4 | 1 | 4 | N | | | 1 | 2 | N |
| Energy consumption | N | Inefficient use of energy | 3 | 4 | 12 | Y | Use of florescent lighting, review of energy use, objectives and targets | 2 | 2 | 4 | N |
| | A | | 4 | 1 | 4 | N | | | 1 | 2 | N |
| | E | | 5 | 1 | 5 | N | | | 1 | 2 | N |
| Archaeology | N | Damage of Archaeological Remains | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N |
| | A | | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 0 | 0 | N | | | 0 | 0 | N |
| Water Use | N | Inefficient use of water | 3 | 2 | 6 | N | N/A | 2 | 2 | 4 | N |
| | A | | 4 | 1 | 4 | N | | | 1 | 2 | N |
| | E | | 5 | 1 | 5 | N | | | 1 | 2 | N |

8.2.2 Rented properties managed by Crossrail

| Aspect | Conditions | Impacts | Pre controls | | | | Controls | Post Controls | | | |
|-------------------------------|------------|--|--------------|-------------|--------------|----------------------|---|---------------|-------------|--------------|----------------------|
| | | | Severity | Probability | Impact Score | Significant (yes/no) | | Severity | Probability | Impact Score | Significant (yes/no) |
| Ecology/Biodiversity | N | Disturbance or destruction of natural habitats | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N |
| | A | | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 0 | 0 | N | | | 0 | 0 | N |
| | N | Spread of invasive species | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N |
| | A | | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 0 | 0 | N | | | 0 | 0 | N |
| Waste Management and Disposal | N | Inefficient waste management, pollution | 3 | 4 | 12 | Y | Waste segregation and correct disposal methods in place | 1 | 3 | 3 | N |
| | A | | 4 | 2 | 8 | N | | | 2 | 2 | N |
| | E | | 5 | 1 | 5 | N | | | 1 | 1 | N |
| Listed building | N | Damage of protected buildings. | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N |
| | A | | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 0 | 0 | N | | | 0 | 0 | N |
| Surface and groundwater | N | Risk of pollution by run-off or direct contact | 2 | 2 | 4 | N | N/A | 2 | 2 | 4 | N |
| | A | | 3 | 1 | 3 | N | | | 1 | 2 | N |
| | E | | 4 | 1 | 4 | N | | | 1 | 2 | N |
| Land contamination | N | Pollution of land, air | 2 | 0 | 0 | N | N/A | 2 | 0 | 0 | N |
| | A | | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 1 | 2 | N | | | 1 | 2 | N |
| Noise and vibration | N | Causing noise and | 2 | 0 | 0 | N | N/A | 2 | 0 | 0 | N |

| | | | | | | | | | | | |
|--------------------------|---|--|----|---|----|---|--|---|---|---|---|
| | A | vibration nuisance | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 1 | 2 | N | | | 1 | 2 | N |
| Dust and Air quality | N | Causing increased air quality/dust through delivery of goods | 2 | 0 | 0 | N | N/A | 2 | 0 | 0 | N |
| | A | | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 1 | 2 | N | | | 1 | 2 | N |
| Consumption of materials | N | Depletion of natural resources | 2 | 2 | 4 | N | N/A | 2 | 2 | 4 | N |
| | A | | 32 | 2 | 6 | N | | | 2 | 4 | N |
| | E | | 4 | 1 | 4 | N | | | 1 | 2 | N |
| Energy consumption | N | Inefficient use of energy | 3 | 4 | 12 | y | Use of florescent lighting, review of energy use, objectives and targets | 2 | 2 | 4 | N |
| | A | | 4 | 1 | 4 | N | | | 1 | 2 | N |
| | E | | 5 | 1 | 5 | N | | | 1 | 2 | N |
| Archaeology | N | Damage of Archaeological Remains | 1 | 0 | 0 | N | N/A | 1 | 0 | 0 | N |
| | A | | | 0 | 0 | N | | | 0 | 0 | N |
| | E | | | 0 | 0 | N | | | 0 | 0 | N |
| Water Use | N | Inefficient use of water | 3 | 2 | 6 | N | N/A | 2 | 2 | 4 | N |
| | A | | 4 | 1 | 4 | N | | | 1 | 2 | N |
| | E | | 5 | 1 | 5 | N | | | 1 | 2 | N |