

43 WASTE

43.1 INTRODUCTION

43.1.1 This chapter addresses the impacts on waste generation resulting from the construction and operation of the Compensation Site and provides details on how this waste will be managed.

43.1.2 The creation of wet grassland at Old Little Humber Farm for the wet grassland site will not require the import or removal of materials. Apart from a Portaloo, there will be no staff facilities at the site. In addition, ground will not be disturbed more than currently done through agricultural practices, so the risk of encountering contaminated waste is negligible. It is therefore assessed that the works at Old Little Humber Farm will not have impacts upon waste generation, and the site is not discussed further in this chapter.

43.2 LEGISLATION, POLICY AND GUIDANCE

43.2.1 Legislation, policy and guidance relating to waste are common to both the AMEP and the Compensation Site and are covered in *Chapter 16*. There are no policies within the ERYC Local Plan Policy that relate specifically to waste.

43.3 ASSESSMENT METHODOLOGY AND CRITERIA

Overview

43.3.1 There is no specific guidance on EIA methodology for assessing the implications of waste management in the UK. As such, a desk-based assessment has been made of the potential main waste sources arising during construction and operation of the Compensation Site, and the impacts of these upon the immediate and wider environment.

43.3.2 The methodology for the assessment of waste from the Compensation Site includes the identification of:

- the potential for natural resource consumption and waste generation during construction and operation of the Compensation Site;
- the practical measures to reduce natural resource consumption and the volumes of waste produced during construction; and

- the impacts of waste arisings during the construction of the Compensation Site.

43.3.3 Under the revised Waste Framework Directive, materials are only considered to be waste if they are discarded, intended to be discarded or are required to be discarded by the holder. As set out in the CL:AIRE guidance, excavation materials which are suitable for reuse on site are unlikely to be regarded as waste. Such reuse may include engineered restoration, landscaping, and creation of bunds and embankments.

43.3.4 Where treatment is required to render excavation material suitable for onsite reuse then an Environmental Permit or Waste Management Licence Exemption may be required. All excavated material will be reused on site and therefore an Exemption is likely to be available.

43.3.5 With certain exceptions, if the works create surplus excavation material requiring disposal then this will be classed as waste. Disposal to landfill is expensive and unsustainable and will be considered to be a last resort. Other disposal options include disposal to a site with a waste exemption or sites with a licence for recycling or reprocessing. Such options are summarised here and will be developed in detail within the Site Waste Management Plan (SWMP) as appropriate. The SWMP will be completed prior to construction and will be updated during the construction period in accordance with the Site Waste Management Plans Regulations 2008.

43.3.6 By the virtue of its role there are no expected 'operational' impacts associated with waste from the Compensation Site.

Sensitive Receptors

43.3.7 The sensitive receptors are the same as set out for the AMEP, being the receiving environment and natural resources.

Significance Criteria

43.3.8 Significance criteria for the Compensation Site follow the same criteria as for the AMEP as set out in *Chapter 23*.

43.3.9 The significance of impacts on sensitive receptors is defined in *Table 43.1*. Impacts which are graded major or moderate are usually those which breach relevant norms enshrined in the SWMPs, Environmental Permits, Exemptions or are required under the Duty of Care. Duty of Care is a requirement that all reasonable due care and attention is

given. If actions are found not to meet this standard then acts are considered negligent. All waste impacts are required to be mitigated through application of the waste hierarchy and by way of storage, treatment and disposal such that impacts are minor or of no significance.

Table 43.1 *Significance Criteria*

Significance	Description
Major Significance	The effect on the sensitive receptor is unacceptable (either because it breaches relevant standards or norms relating to environmental protection and human health, or causes irreversible damage to a valuable asset or resource).
Moderate Significance	The effect on the sensitive receptor must be mitigated (either because it breaches relevant standards, norms, guidelines or policy, or causes long term damage to a valuable asset or resource).
Minor Significance	Some effect on a sensitive receptor may be discernable, the effect is either transient or mainly within currently accepted standards etc, but should be mitigated where cost effective measures are available.
No Significance	The effect is temporary, of low magnitude, within accepted standards etc, and is of little concern to stakeholders.

43.4 *CONSULTATION*

43.4.1 No comments on waste have been received that relate directly to the Compensation Site.

43.5 *BASELINE*

43.5.1 The Compensation Site and its environs are detailed in *Chapter 28*. This site is currently used predominantly for agriculture (producing and receiving very little waste).

43.5.2 Preliminary mass balance calculations have been carried out to estimate the volume of material to be excavated during construction and the volume of fill needed to complete the works. Results from these calculations suggest that the site regrading works could produce around 300 000 m³ of excavated material.

43.5.3 It should be noted that the total organic carbon (TOC) threshold for waste being disposed to an inert landfill is 3 percent. The near surface soils at this site are likely to be organic rich and could have a TOC content in excess of 3 percent. If this is the case, they would not be suitable for disposal to an inert landfill and would need to be taken to an appropriately permitted facility for recovery.

43.6 *IMPACTS*

Construction Phase

43.6.1 The main types of waste that will arise from the construction activities at the Cherry Cobb Sands site include:

- general construction waste (e.g. soils, timber, and concrete waste);
- waste oils from plant; and
- general site office waste.

43.6.2 The significance and magnitude of potential impacts during construction of the Cherry Cobb Sands site in the absence of such mitigation are summarised in *Table 43.2*.

Table 43.2 *Potential Impacts of Waste from the Construction Phase*

Waste type	Potential Impacts		
	Nature	Significance	Magnitude
Inert wastes eg dredgings, soils and excavation wastes	Need for significant treatment and/or disposal capacity (estuary and landfill sites) with attendant transport impacts if unsuitable for on-site reuse.	Moderate	Low
Hazardous wastes eg used oils, paints, contaminated soils	Pollution of groundwater and/or surface waters. Health and environmental impacts in treatment and disposal.	Moderate	High
General construction wastes eg concrete rubble, metal scrap, wood waste	Environmental burdens through inefficient resource use. Transport impacts of off-site treatment and/or disposal.	Minor	Low, cumulative

- 43.6.3 All suitable material generated as a result of reprofiling works within the site will be re-used on site for the construction of the new embankment and therefore it is anticipated that there will no surplus material created. The effect is determined to be of negligible significance.
- 43.6.4 If any contaminated material is encountered, which will be unsuitable for reuse on site, this will be disposed of in accordance with the Waste Management Licensing Regulations 1994 and CL:AIRE guidance.
- 43.6.5 Where other construction waste (e.g. timber, concrete) is suitable for reuse, opportunities will be sought to do so. Materials that are not suited to re-use on site will be made available for re-use elsewhere or recycled as far as possible. The processing of these wastes will be undertaken in waste management facilities used for the processing of wastes arising from a range of sources. The emissions arising from municipal recycling facilities are typically minimal as the materials handled are biologically and chemically inert are not associated with any particular emissions; therefore no significant impacts are anticipated to result from disposal at municipal recycling facilities.
- 43.6.6 The small quantity of remaining wastes that are not readily recycled will be disposed of to normal municipal waste streams and therefore may be processed by incineration, landfill or other locally preferred method.
- 43.6.7 Given the very small quantity of waste that is expected to be produced from the Cherry Cobb Sands site there is considered to be a minimal increase in traffic associated with waste from the site and a resulting negligible significant impact on receptors relating to air quality, traffic, noise and public health.

Operational Phase

- 43.6.8 No wastes will be generated during operation of the Compensation Site.

43.7 CUMULATIVE IMPACTS

Construction Phase

- 43.7.1 As the excavated material on site will be re-used on site, the waste produced will be of negligible significance and will therefore not contribute to cumulative impacts with any other project.

43.8 *MITIGATION MEASURES*

43.8.1 Results from the Site Investigation will identify the presence of contaminated soils, which will inform the potential for re-use of excavated material on site. This information will be used to facilitate early determination of waste streams through implementation of the SWMP prior to the onset of construction.

43.8.2 Material created from reprofiling of the site will be used to create the new flood embankment, and may be used for other environmental enhancements. Site won soils will be treated with lime or cement as required in order to make soils suitable for use in construction of the new flood embankment.

43.8.3 The overall goal during the construction phase, consistent with the waste hierarchy, is to reduce the amount of waste produced to a minimum by the appropriate specification of materials brought to site, the utilisation of site won materials wherever possible and the separation of materials to facilitate recycling. This will be set out in detail, along with targets for reuse, recycling and disposal in the SWMP and in accordance with the CL:AIRE Code of Practice. The SWMP will be a working document and will be updated at regular intervals throughout the project. It will identify and prioritise options for minimisation, reuse and recycling of construction wastes where practicable, and allow any unforeseen changes to the project to be taken into account.

43.9 *RESIDUAL IMPACTS*

Construction Phase

43.9.1 Wastes if managed inappropriately have the potential to cause nuisance and have environmental and public health impacts. These will be mitigated in this development by strict adherence to the waste hierarchy and the adoption of best practice such that any residual impacts resulting from construction of the Cherry Cobb Sands site are of negligible significance.