



# Pitsea Landfill

## Environmental Statement Addendum

Prepared for



Veolia ES Landfill Limited

April 2026  
3645-01-ESA



# Document Control

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## 1.0 INTRODUCTION AND BACKGROUND

### 1.1 Introduction

- 1.1.1 This Environmental Statement ('ES') Addendum has been prepared, on behalf of Veolia ES Landfill Limited ('Veolia' or 'the Applicant'), in support of a Planning Appeal ref. APP/Z1585/W/25/3370673. The Appeal relates to planning application ref. ESS/15/25/BAS, which was refused by Essex County Council ('ECC' or 'the Council') and sought:

*“Continuation of the landfill to facilitate restoration permitted by ESS/49/14/BAS without compliance with condition 4 (completion timescales), condition 5 (removal of buildings and equipment) and condition 21 (restoration scheme) to delay restoration of the composting (and proposed waste wood processing) area and access road and weighbridge facilities by 10 years. ESS/49/14/BAS was a variation permission of ESS/35/06/BAS for recontouring of the landfill to facilitate restoration.”*

at the Pitsea Landfill Site, Pitsea Hall Lane, Pitsea, Essex, SS16 4UH ('the Site').

- 1.1.2 This ES Addendum has been prepared, at the request of the Planning Inspectorate, in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations') and assesses the likely significant effects of the Proposed Development on the environment.

### 1.2 Site Location, Description and Context

- 1.2.1 The Site comprises the Pitsea Waste Management Site, which measures circa. 284 hectares ('ha'), located within Pitsea Marshes to the south of Pitsea. The location of the Site is shown on drawing no. 3645-01-S73-01 submitted as part of the planning application / Appeal.
- 1.2.2 The Site consists of a mix of (restored and unrestored) waste disposal areas, the existing composting facility, grassland and woodland. The Site is bound by nature reserves in all directions.
- 1.2.3 Access is taken from Pitsea Hall Lane to the north, via a private access track. Pitsea Hall Lane connects to the A13 circa. 0.75km to the north of the private access junction.



- 1.2.4 Waste management operations at the Site have taken place at the Site for over 100 years. Landfilling at the Site has ceased and the landfill is currently in the process of being capped and restored, with restoration set to be completed by 31 December 2027. Composting operations at the Site were first approved in 1997, under planning permission ref. ESS/67/96/BAS. Subsequently various applications were submitted to modify and expand the composting operations, all of which were consolidated into one planning permission (ref. ESS/88/23/BAS), which was approved in April 2024.
- 1.2.5 At present, the composting operations are set to cease in the coming years and the composting area is expected to be restored as part of the landfill restoration by 31 December 2027. However, Veolia submitted a planning application ref. ESS/57/24/BAS, for the *“retention of the open windrow green waste composting facility and shredding of oversized green waste and lateral extension of the site to facilitate the introduction of waste wood shredding operations and the retention of existing associated buildings and infrastructure”* to ECC on 8 October 2024. This application was also refused by ECC and is subject to a separate Planning Appeal (ref. APP/Z1585/W/25/3370672) which is ‘twin-tracked’ alongside the appeal to delay the restoration of part of the landfill (the subject of this ES).
- 1.2.6 If both Appeals are allowed, composting operations (and the introduction of new waste wood processing) would take place on the composting area for an additional 10 years, with restoration expected by 31 December 2037. The wider landfill restoration would not be impacted by either application / Appeal; and restoration of areas beyond the compost pad and access road would still be completed by 31 December 2027, as approved.

### **1.3 The Applicant**

- 1.3.1 Veolia is a leader in resource management, offering a comprehensive range of waste, water and energy management services designed to build the circular economy and protect the environment. They focus on manufacturing new greener products, generating low and zero carbon energy, and closing the loop by finding innovative ways to reuse materials. This helps customers and suppliers reduce their carbon impact, preserve scarce raw materials, and achieve greater sustainability.



## 1.4 Assessment Team

- 1.4.1 This ES Addendum has been prepared by Axis, having been appointed by the Applicant. Axis is one of the UK's leading waste management planning consultancies, having secured planning permission for hundreds of such projects.
- 1.4.2 Axis is a competent expert, with extensive experience in the preparation of Environmental Impact Assessments and the authoring of Environmental Statements. In this context, this ES Addendum is prepared in accordance with Regulation 18(5) of the EIA Regulations.

## 1.5 Need for EIA

- 1.5.1 The requirement for EIA was prescribed by European law under Council Directive 85/337/EEC. This Directive has been amended four times with the latest amendment, the EIA Directive 2014/52/EU, entering into force on 15 May 2014. In England, the Directive has been transposed most recently into law by the EIA Regulations [SI 2017 No. 571]. These regulations came into force on the 16 May 2017.
- 1.5.2 Schedule 1 of the EIA Regulations 2017 lists categories of developments for which EIA is mandatory, whilst Schedule 2 lists categories of development for which EIA may be required depending upon, inter alia, whether the development is likely to have significant environmental effects.
- 1.5.3 Pursuant to the EIA regulations, non-hazardous landfilling represents Schedule 2, Part 11(b) development<sup>1</sup>. However, it should be noted that the Proposed Development simply seeks to delay the restoration of part of a landfill site which has not been used for landfilling operations; and no new or additional disposal activities are proposed. The Proposed Development is more closely aligned to Schedule 2, Part 13(b)<sup>2</sup> of the EIA Regulations.
- 1.5.4 Were the Proposed Development subject to EIA Screening in relation to either of the abovementioned categories, it is expected that the development would be screened as non-EIA, by virtue of the fact that it would not give rise to 'likely significant effects'

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<sup>1</sup> Other projects - Installations for the disposal of waste (unless included in Schedule 1)

<sup>2</sup> Changes and extensions - Any change to or extension of development of a description listed in paragraphs 1 to 12 of column 1 of this table, where that development is already authorised, executed or in the process of being executed.



when assessed against Schedule 3 of the EIA Regulations. Notwithstanding this, the Planning Inspectorate are of the view that the Proposed Development should be supported by an EIA on the basis that the previous consents were subject to an EIA.

1.5.5 In the above context, this ES Addendum has been prepared and submitted in response to the request from the Planning Inspectorate.

## 1.6 Scope of EIA

1.6.1 This ES Addendum has not been subject to a formal scoping exercise with either ECC or the Secretary of State. The Planning Inspectorate has confirmed, however, that an ES Addendum to the previously submitted ES documents is appropriate in this case. These previous ES documents comprise:

- **'The 2006 ES'** – *Proposed Installation of Waste Pre-Treatment Facilities and Recontouring of Landfill to Facilitate Restoration – Pitsea Waste Management Facility, Pitsea Hall Lane, Pitsea – Volume 2 Environmental Statement* (Applied Environmental Research Centre Ltd, June 2006); and
- **'The 2014 ES'** - *Environmental Statement for the Extension of Time to Complete the Restoration of Pitsea Landfill, Pitsea, Essex – Volume 2 – Environmental Statement* (SLR Global Environmental Solutions, November 2014)

1.6.2 Given the minor nature of the Proposed Development, i.e. the delay to the restoration of an 'unworked' part of the Site, this ES Addendum does not include technical assessment of the topics previously assessed. Rather, this Addendum reconsiders the baseline and provides a high-level non-technical reassessment of each of the previously assessed topics.

1.6.3 As mentioned, the Planning Appeal that this ES Addendum is submitted in support of is 'twin-tracked' with an appeal for the continuation of composting, and introduction of new waste wood processing, operations within the area where restoration is proposed to be delayed (ref. APP/Z1585/W/25/3370672). This ES Addendum focuses solely on the environmental effects associated with the delay to restoration, however, reference to the composting / waste wood processing is made (where relevant).



1.6.4 Schedule 4 of the EIA Regulations sets out the information to be included in an ES. References to chapters in the ES where information relevant to the requirements of Schedule 4 can be found are listed within Table 1.1 below.

**Table 1.1: Review of Schedule 4 Requirements**

Para	Requirement	Where Addressed Within this ES Addendum
1	<p>A description of the development, including in particular:</p> <p>(a) a description of the location of the development;</p> <p>(b) a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;</p> <p>(c) a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used;</p> <p>(d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.</p>	<p>(a) Chapter 1.0 of this ES Addendum</p> <p>(b) Chapter 1.0 and 2.0 of this ES Addendum</p> <p>(c) Chapter 1.0 and 2.0 of this ES Addendum</p> <p>(d) Chapter 2.0 of this ES Addendum</p> <p>Detail of points (a) to (d) for the existing operations are also provided in the 2006 ES and the 2014 ES.</p>
2	<p>A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.</p>	<p>Chapter 3.0 of this ES Addendum.</p> <p>Consideration of the alternatives in relation to the existing operations is also provided in the 2006 ES and the 2014 ES.</p>
3	<p>A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.</p>	<p>A description of the baseline environmental conditions is provided within the 2006 ES and the 2014 ES.</p> <p>As set out at Chapter 4.0 of this ES Addendum, whilst there have been some changes to the baseline, these are not expected to have any significant impact on the findings of the previous ES documents.</p> <p>The applicant does not consider that future natural changes in the baseline scenario would have any influence on the environmental effects of the development within the lifetime of the development.</p>

Para	Requirement	Where Addressed Within this ES Addendum
4	<p>A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.</p>	<p>An assessment of these factors, in relation to the existing facility, can be found within the 2006 ES and the 2014 ES. High level reassessment of these factors is provided (where relevant) throughout this ES Addendum.</p>
5	<p>A description of the likely significant effects of the development on the environment resulting from, inter alia:</p> <ul style="list-style-type: none"> <li>(a) the construction and existence of the development, including, where relevant, demolition works;</li> <li>(b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;</li> <li>(c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;</li> <li>(d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);</li> <li>(e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;</li> <li>(f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;</li> <li>(g) the technologies and the substances used.</li> </ul> <p>The description of the likely significant effects on the factors specified in regulation 4(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union level which are relevant to the project, including in particular those established under Council Directive 92/43/EEC and Directive 2009/147/EC</p>	<p>A summary of the likely significant environmental effects from the previous ES documents is provided in Chapter 4.0 of this ES Addendum.</p> <p>Chapter 4.0 also confirms that the Proposed Development is not likely to give rise to significant environmental effects in relation to points (a) to (g).</p>
6	<p>A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.</p>	<p>The overall EIA methodology is set out in the 2006 ES and the 2014 ES.</p>



Para	Requirement	Where Addressed Within this ES Addendum
7	A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.	Mitigation measures for the existing facility are detailed throughout the 2006 ES and the 2014 ES.  It should be noted, however, that due to the cessation of landfilling at the Site most of the mitigation detailed previously is no longer required.
8	A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.	Chapter 4.0 of this ES Addendum.
9	A non-technical summary of the information provided under paragraphs 1 to 8.	A separate NTS is submitted alongside this ES Addendum.
10	A reference list detailing the sources used for the descriptions and assessments included in the environmental statement.	References to information used are provided, where necessary, throughout the 2006 ES and the 2014 ES.



## 2.0 SCHEME DESCRIPTION

### 2.1 Introduction

2.1.1 The planning application sought consent to not comply with condition 4 (completion timescales), condition 5 (removal of buildings and equipment) and condition 21 (restoration scheme) of planning permission ref. ESS/49/14/BAS under Section 73 of the Town and Country Planning Act 1990 ('TCPA'). Specifically, the application sought to delay the restoration of part of the Site by 10 years to enable the continued operation of the existing composting facility.

### 2.2 Proposed Development

2.2.1 As mentioned, planning application ref. ESS/15/25/BAS was submitted alongside another planning application (ref. ESS/57/24/BAS), which sought consent for the continued operation of the existing composting facility along the western boundary of the Site for a further 10 years; and the introduction of wood processing at the composting facility. The composting facility falls entirely within the landfill site and was shown as part of the restoration strategy for the landfill, hence there is a need to 'vary' the landfill consent to accommodate the delay to restoration in the composting area.

2.2.2 The area proposed to be delayed for restoration (identified as the '*composting and waste wood processing area*' on drawing no. 3646-01-S73-02 submitted as part of the planning application / Appeal) has been utilised for composting activities for several decades and is not understood to have been used for landfilling at any point. Under planning permission ref. ESS/49/14/BAS the composting area was set to be restored to amenity grassland and tall-herb grassland / shrub, in line with '*P/2 Site Restoration dated June 2014*', by 31 December 2027. It should be noted that an updated detailed restoration strategy (which shows the composting area restored to different habitat) is in the process of being agreed between Veolia and ECC, in accordance with the requirements of the Section 106 agreement.

2.2.3 It is proposed that the restoration of the composting area is simply delayed by up to 10 years, until 31 December 2037, to facilitate the continued operations sought by planning application ref. ESS/57/24/BAS. After this date the compost site would be restored in line with approved details, no change to the timings for restoration across



the wider landfill site are proposed and these areas would continue to be restored in line with the current approved timescales.

- 2.2.4 No production processes, residues or emissions would be required or produced as a result of the proposed delay to the restoration.
- 2.2.5 To facilitate the Proposed Development, the following changes to planning conditions attached to planning permission ref. ESS/49/14/BAS are proposed (changes shown in red):

#### **Condition 4 – Timescales**

*Deposit of non-hazardous and inert materials for restoration shall cease by the 31 December 2025 and the site shall have been restored by 31 December 2027 in accordance with the scheme approved under Conditions 21 and 28, with the exception of the composting and waste wood processing area (as defined on drawing ref. 3645-01-S73-02), which shall be restored in accordance with the scheme approved under Conditions 21 and 28 by 31 December 2037. Each phase of restoration shall be the subject of aftercare for a period of 5 years in accordance with a scheme approved under Condition 25 of this planning permission.*

#### **Condition 5 – Removal of buildings and equipment**

*Any building, plant, machinery, foundation, hard standing, roadway, structure or erection in the nature of plant or machinery used in connection with the development hereby permitted shall be removed from the site when no longer required for the purpose for which built, erected or installed and in any case not later than 30 June 2027 and the land restored in accordance with the restoration scheme approved under Condition 21 of this permission by 31 December 2027. This excludes buildings, equipment and hardstanding in the composting and waste wood processing area (as defined on drawing ref. 3645-01-S73-02), which shall be restored in accordance with the approved restoration scheme no later than 31 December 2037.*

#### **Condition 21 – Restoration Scheme**

- a) *The site shall be restored in accordance with the "Restoration Masterplan" (Report Ref. 78880011/R3241) dated December 2008 prepared by AMEC and*



*drawing Ref. No. 7888001186/PRMP/02 Rev A dated December 2008 as amended by Figure 3 Revised Restoration Masterplan dated January 2018*

- b) *Prior to seeding of restored areas details of the surface treatment and seeding mix to be created in accordance with the Restoration Masterplan approved under Condition 21(a) above shall be submitted to and approved in writing by the Waste Planning Authority. The seeding details shall include seed mixes, species, spacing, protection measures and a programme of implementation. The seeding details shall be implemented within the next available seeding season following approval of the details. The planting shall be maintained in accordance with the approved details in accordance with Condition 25 of this permission. The final phase of the landfill area (as defined on drawing ref. 3645-01-S73-02) to be restored shall be completed in accordance with the approved details by 31st December 2027. Restoration of the composting and waste wood processing area (as defined on drawing ref. 3645-01-S73-02) shall be completed in accordance with the approved details by 31 December 2037.*



## 3.0 ALTERNATIVES

### 3.1 Introduction

3.1.1 Regulation 18 and Schedule 4 of the EIA Regulations identify the information that should be included as part of an ES. Regulation 18, Paragraph 3(d) states that:

*“An environmental statement is a statement which includes at least...a description of the **reasonable** alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment.” (emphasis added)*

3.1.2 Meanwhile, Paragraph 2 of Schedule 4 requires:

*“A description of the **reasonable** alternatives (for example in terms of design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including comparison of the environmental effects.” (emphasis added)*

3.1.3 It should be noted that the EIA Regulations place no specific obligation on a developer to study alternatives, but simply to describe them in the manner specified, where they have been considered.

3.1.4 There is no definition within the EIA Regulations as to what constitutes a “reasonable” alternative. The Cambridge English Dictionary defines “reasonable” as being “based on or using good judgement and therefore fair and practical.”

### 3.2 Alternatives Considered

3.2.1 Alternatives to the Proposed Development have been considered below. None of these have been found to be ‘reasonable’ alternatives to the Proposed Development.

#### ***No Delay to Restoration***

3.2.2 Under this scenario there would be no delay to the restoration, and the composting area would be restored by 31 December 2027 as currently approved.



3.2.3 If the composting area were to be restored in 2027 then composting operations would not be able to continue. As set out through planning application ref. ESS/57/24/BAS, there is a clear need to retain the capacity offered by the existing facility and there are no suitable or available Strategic Site Allocations or locations within the Areas of Search as identified in the Waste Local Plan for Essex.

3.2.4 In the above context, the facility's closure to restore the composting site in line with the current landfill consent, is not considered to represent a reasonable alternative.

#### ***Shorter Delay to Restoration***

3.2.5 Another alternative may be that a shorter period to the delay to restoration is sought (e.g. 2 years, 5 years, etc...).

3.2.6 Whilst this approach would see the landfill fully restored sooner, it would only secure the composting capacity offered by the Site for a very short period. A shorter extension period would limit the contribution that the facility could make to sustainably managing waste; and significantly reduce the Applicant's ability to secure waste contracts, impacting the viability of retaining the facility.

3.2.7 Given the above, it is considered that a shorter period of delay to restoration of the composting area is not feasible due to the impact on the viability of the continuation of composting operations.

#### ***Conclusions***

3.2.8 It is concluded that the proposed 10-year delay to restoration in the composting area, to facilitate the continued operation of the composting facility, represents the most suitable and viable approach; and no reasonable alternatives are available.



## **4.0 ASSESSMENT OF EFFECTS**

### **4.1 Introduction**

4.1.1 As set out, the Proposed Development only seeks to delay the restoration of part of the Site. There would be no change to the remaining restoration, which would be delivered in line with the current timeframes; and there would be no change to, or continuation of, landfill operations, which have now ceased in line with the current operative consent (ref. ESS/49/14/BAS).

4.1.2 The following section reestablishes the baseline for the Site and surrounding area; provides a high-level assessment of the Proposed Development against the findings of the previous ES documents. It also considers indirect upstream and downstream effects, in light of the Supreme Court judgement on R (on the application of Finch on behalf of the Weald Action Group) v Surrey County Council and others (the 'Finch' judgement); and the vulnerability of the Proposed Development to major accidents or disaster.

### **4.2 Baseline**

4.2.1 The 2014 ES provides the most up-to-date assessment of the environmental baseline of the Site for each of the relevant technical disciplines. The previously identified baseline for each discipline is summarised below and a comparison to the current baseline is provided.

#### ***Transport***

4.2.2 The 2014 ES sets out the access arrangements for the Site. The only notable change to the access arrangements since the previous ES was produced has been the improvements to the railway bridge to the north of the Pitsea Hall Lane / Station Approach junction. The bridge has been converted to a single lane of traffic with priority given to southbound traffic (heading towards the Site). Given the reduction in traffic associated with the Site, which is discussed further below, this is not expected to have a material impact on the transport baseline for the Site.

4.2.3 It also confirmed that at the time of the 2014 assessment HGV movements associated with the Site were no more than 1100 movements (550 in / 550 out) Monday to Saturday and 100 movements (50 in / 50 out) on Sundays and Public Holidays. Given that landfill operations have now ceased, the only HGV movements



associated with the Site are those relating to restoration of the wider landfill (to be completed by the end of 2027) and the ongoing composting operations. In this context, the number of HGV movements associated with the Site have decreased sharply, representing a betterment to the current transport baseline.

4.2.4 The 2014 ES also identifies other developments along Pitsea Hall Lane. There has been no notable change to these identified uses since the assessment in 2014.

4.2.5 There have been changes in the transport baseline. However, these changes represent betterments to the baseline so would not increase the significance of any effects assessed through the 2014 ES.

### ***Air Quality***

4.2.6 The 2014 ES confirms that appropriate air quality mitigation was implemented in line with the 2006 ES. This included improvements to the landfill gas collection system and measures to control dust. The 2014 ES confirmed that the continuation of landfill activities sought through the previous consent, to complete the capping, would further improve the efficiency of the landfill gas management system. The 2014 ES also highlights that the development would continue to operate in accordance with its Environmental Permit and the Dust Management Plan. It was concluded that no additional impacts, save for those associated with the delay in capping the landfill, were anticipated as part of the development.

4.2.7 The air quality baseline has improved significantly since the 2014 ES was produced. The landfill has now been capped and is in the process of being restored. This means that air quality impacts (dust and odour) are likely to have reduced / ceased; and the landfill gas collection system is fully functioning.

4.2.8 Whilst there have been changes in the air quality baseline for the Site, these are positive and would not increase the significance of any of the effects assessed through the 2014 ES.

### ***Noise***

4.2.9 The 2014 ES highlights that the landfill operations were subject to several noise conditions that were complied with as part of the extended operations. No new noise impacts, beyond those considered in the 2006 ES were identified.



- 4.2.10 Landfilling at the Site has now ceased and restoration is underway. This represents a reduction in activity at the Site, meaning that the level of noise produced at the Site is likely to have reduced. Upon the completion of restoration activities noise levels would reduce further.
- 4.2.11 Fresh monitoring of the noise baseline was undertaken as part of the Noise Assessment submitted in support of planning application ref. ESS/57/24/BAS, a copy of which was submitted for reference as part of ESS/15/25/BAS.
- 4.2.12 The noise baseline for the Site has changed for the better, as such, significance of the effects assessed as part of the 2014 ES would not be increased.

### ***Water***

- 4.2.13 The 2014 ES confirms that the Site sits above a Chalk aquifer, which is protected by an engineered liner and a natural layer of London Clay. It also sets out that the leachate treatment plant discharges into Vange Creek with no impact on water quality, but that the effects of the extended landfilling activity needed to be assessed. The 2014 ES also identifies that the Site lies within an area at risk of flooding; and that the surface water management scheme would remain as approved in 2006.
- 4.2.14 There has been no change to the manner in which the landfill operates in terms of groundwater protection, leachate treatment or surface water drainage since the 2014 ES was produced. Contours have been completed as approved (and assessed as part of the previous ES documents) and the Site is in the process of being restored.
- 4.2.15 The completion of landfilling means that large parts of the site (i.e. the main landfill area) are now shown as Flood Zone 1. The areas around the peripheries, including part of the access road and the composting area are now shown to fall within Flood Zone 2. The 2006 ES previously showed the whole site to fall within Flood Zone 3a, meaning that the flood risk baseline has improved since the previous assessments were undertaken.
- 4.2.16 Based on the above, there are no changes to the water environment baseline and the changes to the flood risk baseline is a positive one. As such there would be no increase in the significance of effects assessed as part of the 2006 or 2014 ES.



### ***Geology and Soils***

- 4.2.17 The 2014 ES sets out the geological sequence for the landfill and reasserts that the London Clay barrier provides protection to the chalk layer below the landfill. It confirms that soils will not be impacted by landfill operations and that restoration soils were to be imported to the Site. The 2014 ES highlights that the 2006 ES identified no significant effects on geology and soils.
- 4.2.18 The geological baseline has not changed since the 2014 ES was prepared. Whilst restoration soils have been imported and placed within the landfill since the production of the 2014 ES, this has not changed the baseline in terms of soils.

### ***Ecology***

- 4.2.19 The 2014 ES identifies several Statutory and Non-Statutory Sites within 2km of the Site. It also sets out several protected / notable species recorded at the Site.
- 4.2.20 The ecological baseline for the Site was reestablished through the Preliminary Ecological Appraisal ('PEA') in support of planning application ref. ESS/57/24/BAS, a copy of which was submitted for reference as part of ESS/15/25/BAS. Whilst the parameters of the desk-based study for the PEA were different, a similar baseline has been identified, with the same ecological sites having been identified along with more up-to-date records of nearby species.
- 4.2.21 Whilst records of local species have been updated since 2014, as confirmed through the PEA, this change to the baseline would not result in any significant changes to the previously identified effects.

### ***Landscape***

- 4.2.22 The 2014 ES did not note any changes to the landscape baseline of the Site, noting that the landform and landscape would be delivered in line with the details agreed in the 2006 ES. This is still the case and the landfill is in the process of being completed in accordance with these details.
- 4.2.23 The 2014 ES identifies the Site as falling within National Character Area 81, at a national level; and within the South Essex Coastal Towns, at a local level. The Landscape and Visual Appraisal ('LVA') submitted in support of planning application ref. ESS/57/24/BAS, and for reference as part of ESS/15/25/BAS, confirms this to



still be the case. Therefore, the baseline landscape character of the site and surrounding area is the same as it was in 2014.

4.2.24 The 'value of the application site to the study area' and the 'landscape character value adjacent to the application site' are relatively unchanged. The only notable change is the progression of the restoration of the landfill, which was noted as an ongoing improvement as landfill operations progressed.

4.2.25 Overall, the landscape baseline for the Site remains relatively unchanged, with the only change being the progression of landfill operations / restoration.

### ***Cultural Heritage***

4.2.26 The 2014 ES confirms that no significant cultural heritage assets were identified in the 2006 ES; that the nearest listed building is located approximately 1.5km from the Site; and that the nearest Scheduled Monument is located off Northwick Road. This position remains the case.

4.2.27 In the above context, the cultural heritage baseline remains unchanged from the 2014 ES.

### ***Socio-Economic***

4.2.28 The 2014 ES confirms that no socio-economic impacts were identified as part of the 2006 ES and that the previous application to extend the life of the landfill would not result in any significant impacts. Economic benefits were identified in the form of contributions to the Pitsea Environmental Trust Fund from landfill tax.

## **4.3 Environmental Effects**

### ***Transport***

4.3.1 Chapter 8 of the 2014 ES provided a reassessment of traffic impacts as a result of continued landfill and restoration operations until 31 December 2027. It was concluded that:

- In relation to highway capacity or delay - *the proposed application would continue to be operated at an acceptable level causing no additional driver delay.*



- In relation to road safety - *the site has operated for many years generating HGV movement without any history of accident issues, as demonstrated by the obtained five-year accident data. It is considered, therefore, that the proposed application would be acceptable in terms of highway safety.*
- In relation to amenity – *planning conditions control the impact of the application site on local amenity and will continue to do so throughout the proposed time extension sought by the application proposals.*
- In relation to pedestrians and cyclists – *there was concluded to be good access provision and no safety issues with regards to pedestrian and cycle use.*

4.3.2 Residual effects were assessed to be at most low and the development was concluded to be acceptable in traffic and transport terms.

4.3.3 As discussed above, waste vehicle movements associated with the landfill have now ceased. The remaining restoration vehicle movements associated with the wider landfill are anticipated to cease by the end of 2027. Provided consent for the continuation of composting operations (as sought through planning application ref. ESS/57/24/BAS) is secured, this would leave just the composting vehicle movements, which are a fraction of those previously associated with the Site.

4.3.4 The act of delaying restoration of the composting area would not result in any vehicle movements for the 10 additional years of composting operations. Some movements, associated with the restoration of the composting area, would be generated at the end of the 10 years. However, the movements associated with the restoration of the composting area are anticipated to be comparable with movements associated with the composting operations and would be significantly less than previous levels seen at the Site.

4.3.5 In the above context, it is clear vehicle movements associated with the Proposed Development would fall well below those previously assessed and found to be acceptable during the entirety of the 10 year period, meaning that there would be no significant transport effects as a result of the delay to restoration of the composting area.



### ***Air Quality***

- 4.3.6 Chapter 9 of the 2014 ES provided an assessment of the potential effects of landfill gas generation potential as a result of the delay to completion and capping only. It did not consider other potential air quality impacts (dust, odour, bioaerosols, etc.). It was concluded that the delay to capping would result in the emission of greater volumes of landfill gas, however, with adherence to the Gas Management Plan these would be minimised and no further mitigation was required.
- 4.3.7 As set out above, the air quality context has changed since the 2014 ES was produced. Landfilling has now been completed, and the landfill is entirely capped, meaning that landfill gas is now being collected managed in line with the approved approach.
- 4.3.8 The proposed delay to restoration of the composting area would have no effect on landfill gas for two reasons. Firstly, the composting area has not previously been used for landfilling, meaning that no landfill gas is produced in this area; and, secondly, as the restoration of the composting area is not required to ensure the effective management of landfill gas.
- 4.3.9 Chapter 14 of the 2006 ES considered other impacts on odour, dust particulate and litter. It was concluded that there was a low risk of adverse odour, particulate matter and litter effects, due to the environmental setting; risk management and monitoring measures employed; and other aspects of the Site. These elements were not reassessed as part of the 2014 ES. It should be noted that landfilling, the main source of these effects has now ceased, meaning that effects are likely to have reduced since 2006. Furthermore, the proposed delay to the restoration of the composting area would have no notable effect on odour, dust particulate, litter or air quality considerations.
- 4.3.10 In the above context, it is clear that the Proposed Development would not give rise to any significant air quality effects.

### ***Noise***

- 4.3.11 Noise was not reassessed as part of the 2014 ES; however, an assessment was undertaken through Chapter 13 the 2006 ES. The 2006 ES considered the potential impacts from noise associated with the construction of the mechanical biological treatment facility and the operation of the landfill. The assessment found that some



of the landfilling operations would exceed noise limits at the most sensitive receptor (Wat Tyler Country Park) for a temporary period but highlighted that operational measures would be taken to reduce noise levels. The impacts were concluded to be short-term and generally low impact.

- 4.3.12 The noise impact of the continued composting, and new waste wood processing, operations within the composting area have been assessed separately through the Noise Assessment submitted in support of planning application ref. ESS/57/24/BAS, and for reference as part of ESS/15/25/BAS. This demonstrates that the effects from the composting and wood processing operations would be acceptable from a noise perspective.
- 4.3.13 The proposed delay to the restoration of the composting area itself would not result in any noise impacts during the 10-year extension period sought. Some noise may be generated by the restoration activities at the end of the 10-year period; however, these activities have already been found to be acceptable through the previous consents. Moreover, it is expected that the same operational limits would be applied to the delayed restoration of the composting area (i.e. restrictions on timings, plant specifications, etc.).
- 4.3.14 In the above context, it is clear that the delay to the restoration of the composting area would not result in any significant noise effects.

#### ***Flood Risk and Water Environment***

- 4.3.15 Chapter 11 of the 2006 ES identified the whole site as falling within Flood Zone 3a, with protection from 1 in 200-year events from existing flood defences. It was concluded that with the presence of adequate defences the development was acceptable from a flood risk perspective but required a surface water management system to ensure suitable run-off rates. Chapter 10 of the 2014 ES included a reassessment of flood risk, which provided an updated assessment of the 2006 prepared flood risk assessment. It was concluded that there was no / localised potential for flood risk at the Site and that the previous flood risk assessment was adequate.
- 4.3.16 An assessment of the impact on the water environment as a result of the continued landfill operations was also undertaken in the 2014 ES. This concluded that sufficient measures would be put in place to ensure that the leachate management system



had adequate capacity to prevent it from becoming overwhelmed; and that the approved surface water management system would be expanded as capping of the landfill continued. The Site was also expected to be subject to appropriate surveillance in accordance with the Environmental Permit.

- 4.3.17 As mentioned, the level of mapped flood risk across the Site has reduced since the 2006 ES was produced, with the Site no longer falling entirely within Flood Zone 3a and now falling within Flood Zones 1 and 2. The proposed delay to the restoration of part of the Site would not contribute to or be significantly impacted by flooding, as such no significant environmental effects are expected in relation to flooding.
- 4.3.18 There will be no change to the existing leachate or surface water management systems, which would be maintained as existing; nor would the delay to the restoration prevent any leachate or water management equipment from being implemented. In this context, there would be no impact on the water environment as a result to the delay in restoration of the composting area.
- 4.3.19 In the above context, there would be no significant flood risk or water environment effects as a result of the Proposed Development.

### ***Geology and Soils***

- 4.3.20 Assessment of geology and soils were scoped out of both the 2006 ES and the 2014 ES on the grounds that landfilling would have no significant effects.
- 4.3.21 As outlined, landfilling has now been completed, and the landfill is in the process of being restored. Furthermore, the Proposed Development would not include any changes that would alter this conclusion. No changes to the landform, or its underlying geology, or the type or volumes of soil to be used in the landfill are proposed.
- 4.3.22 In the above context, it is clear that the Proposed Development would not result in any significant effects on geology or soils.

### ***Ecology***

- 4.3.23 Chapter 6 of the 2014 ES provides an assessment of the likely significant ecological impacts associated with the continuation of landfilling operations at the Site. It found that the continued landfilling operations would have the following effects:



- **Nationally and Locally Designated Sites** – no residual impacts with continued adherence with environmental protection measures in the Environmental Permit and monitoring of fox predation.
- **International Nature Conservation Designations** – no residual effects with continued adherence with environmental protection measures in the Environmental Permit.
- **Protected and Notable Species** – no residual effects with continued implementation of Biodiversity Benchmark and environmental protection measures in the Environmental Permit and monitoring of fox predation.

4.3.24 In the above context, it was concluded that the continuation of landfilling would not result in significant residual effects on ecology, provided that existing mitigation and compensation measures were maintained to minimise long-term adverse effects. No additional mitigation measures were considered to be necessary.

4.3.25 Assessment of the ecological effects of continued composting, and new waste wood processing, operations were reassessed as part of the PEA and Ecology Technical Note submitted in support of planning application ref. ESS/57/24/BAS, and for reference as part of ESS/15/25/BAS. This includes consideration of the effects of delaying restoration of the composting area.

4.3.26 The Ecology Technical Note (20 March 2025), which was prepared in response to ECC and Place Services comments, provides an assessment of the impact of delaying restoration, finding (*inter alia*) that:

- The delay to restoration would not impact designated features of the nearest ecological asset (Holehaven Creek SSSI); and
- The unrestored area would not act as a barrier for the dispersal of flora and fauna (particularly the black-tailed godwit) between existing habitats and the landfill site, with connections possible to the north and south of the unrestored area.

4.3.27 The findings of the Ecology Technical Note, along with those presented in the PEA, demonstrate that the delay to restoration of the composting area would not result in significant effects on ecology.



### ***Landscape and Visual***

- 4.3.28 Chapter 7 of the 2014 ES provided an appraisal of the landscape and visual effects of continued landfilling at the Site.
- 4.3.29 In terms of landscape effects, the continued landfilling was considered to have a minor / moderate importance of impact at a site level; and a minor / moderate impact on the wider landscape. It was also noted that the completion of the landform and restoration would deliver benefits to the landscape in the longer term. These effects were not considered to be significant.
- 4.3.30 The impact on 8no. viewpoints were assessed as part of the 2014 ES. It was determined that the effects of continued landfilling activities would be at most moderate at 2no. viewpoints; minor adverse at 5no. viewpoints and negligible at 1no. viewpoint. The ES also noted that in the long-term the restoration of the Site would have a beneficial visual effect.
- 4.3.31 As noted above the baseline has changed since the 2014 ES, with landfilling now completed and restoration nearing completion (set to be completed by the end of 2027). An LVA and Landscape Note were submitted in support of planning application ref. ESS/57/24/BAS, and for reference as part of ESS/15/25/BAS.
- 4.3.32 In terms of the reassessed landscape impacts, it was concluded that the development (which included the retention of existing composting and new waste wood processing operations not considered as part of this ES Addendum) would have limited effects, with minor / moderate adverse effects on LCA 3 South Essex Coastal Towns at most. In terms of visual receptors, the reassessment of visual effects (which again included consideration of existing composting and new waste wood processing operations not considered as part of this ES Addendum) found that the development would be visually constrained and would give rise to very modest change to existing landscape character and visual amenity.
- 4.3.33 Given that the findings of the LVA and Landscape Note it is clear that the delay to restoration and continuation of existing composting (and new waste wood processing) operations would not result in significant landscape and visual effects, it can be concluded that the delay to restoration when considered alone would also not give rise to significant landscape and visual effects.



4.3.34 It is noted that following the 10-year delay to restoration, works would need to be undertaken to restore the composting area. However, as demonstrated in the 2014 ES, activities associated with landfilling and restoration would not give rise to significant landscape and visual effects.

4.3.35 On the basis of the above, it is clear that the Proposed Development would not result in significant landscape and visual effects.

#### ***Cultural Heritage and Archaeology***

4.3.36 Cultural heritage and archaeology were scoped out of both the 2006 ES and the 2014 ES due to there being no likely significant effects.

4.3.37 As discussed above, the baseline position has not changed, meaning that the receptors that may be affected have not changed. Moreover, no changes with the potential to effect heritage assets or archaeology are proposed as part of the development.

4.3.38 It is clear that the Proposed Development would have no significant effect on cultural heritage or archaeology.

#### ***Socio-Economic***

4.3.39 An assessment of the socio-economic effects of landfilling was scoped out of both the 2006 ES and the 2014 ES, as no significant effects were anticipated. Similarly, the proposed delay to the restoration of part of the Site is not anticipated to result in any significant socio-economic effects.

### **4.4 Indirect Upstream and Downstream Effects**

4.4.1 On 20 June 2024, the Supreme Court handed down the majority Finch judgement. There is a consensus that because the judgement was about the need to assess indirect effects, irrespective of what they may be, the principles arising from the Finch judgement are applicable outside of the sphere of fossil fuel extraction development. There are, in essence, three questions to determine whether an EIA is required to assess indirect upstream and / or downstream effects:

1. Would the development give rise to inevitable indirect upstream or downstream effects i.e. would there be inevitable causation?



2. Is it possible to undertake evidence based meaningful assessment of the effects?

3. Will an assessment reasonably conclude likely significant effect(s)?

4.4.2 Having considered question '1' in relation to the proposed 10-year delay to the restoration of the composting area, whilst there are some limited direct effects (considered above), no inevitable indirect effects as a result of the Proposed Development have been identified.

4.4.3 In the above context, the principles established by the Finch judgement are not considered applicable in the case of the Proposed Development.

#### **4.5 Vulnerability to Major Accidents / Disasters**

4.5.1 Schedule 4 paragraph 8 of the EIA Regulations 2017 requires that the ES includes a description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and / or disasters which are relevant to the project concerned. Further to this, where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events and the approach to managing emergencies.

4.5.2 The reference to disasters is interpreted to relate to natural events, as indicated by the preamble to the 2014 Directive (2014/52/EU) which states at paragraph 15 *"In order to ensure a high level of protection of the environment, precautionary actions need to be taken for certain projects which, because of their vulnerability to major accidents, and/or natural disasters (such as flooding, sea level rise, or earthquakes) are likely to have significant adverse effects on the environment"*. Nonetheless, it is recognised that disasters can occur as a result of human intervention e.g. conflict and war, political influences etc.

4.5.3 The Proposed Development is located within a politically, geologically and meteorologically stable part of Europe. Accordingly, the Facility is not at material risk from, for example, civil unrest, war, earthquakes or extreme weather conditions (hurricanes etc.).



- 4.5.4 The part of the Site where restoration is proposed to be delayed includes some areas that lie within Flood Zone 2, meaning there is a medium risk of flooding<sup>3</sup>. Annex 3 of the NPPF sets out the vulnerability of different types of development in flood risk terms. Whilst landfills fall within the ‘more vulnerable’ category of Annex 3, the Proposed Development only seeks to delay the restoration of parts of the landfill site that have not been actively used for landfilling. The proposed delay to restoration of part of a landfill not actively used for landfilling does not fall neatly into one of these categories but would be most akin to open space (i.e. an undeveloped area of land), which is a ‘water-compatible development’.
- 4.5.5 Given the fact that the delay to restoration itself is likely to represent a ‘water-compatible development’, it is clear that there would be limited vulnerability to flood related disaster that would give rise to significant environmental effects.
- 4.5.6 With regard to major accidents the 2014 Directive describes that: *“it is important to consider their [i.e. the Proposed Development] vulnerability (exposure and resilience) to major accidents and/or disasters, the risk of those accidents and/or disasters occurring and the implications for the likelihood of significant adverse effects on the environment.”* The focus here, as it is within the EIA Regulations, is on the vulnerability of the Proposed Development to major accidents and/or disasters and the likelihood of significant adverse effects occurring.
- 4.5.7 It should also be noted that the landfill has been successfully operated for several decades without major accident or disaster. Legacy management of the landfill (i.e. landfill gas and leachate management), following the completion of tipping, would continue to be managed in accordance with the provisions of the Environmental Permit in the long-term, meaning that the environment and human health would continue to be satisfactorily protected in accordance with the regulatory requirements established by UK and European legislation.
- 4.5.8 Based upon the foregoing, it is concluded that the Proposed Development would not give rise to significant adverse effects on the environment deriving from the vulnerability of the development to risks of major accidents and / or disasters. Accordingly, the specific topic of the risks arising from major accidents and / or

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<sup>3</sup> 0.1% to 1% annual chance of river flooding (1 in 100 to 1 in 1,000 years) or 0.1% to 0.5% chance of sea flooding (1 in 200 to 1 in 1,000 years)



disasters is not considered further within this ES Addendum and is deemed to have been properly considered in terms of compliance with the EIA Regulations 2017.



## 5.0 SUMMARY AND CONCLUSIONS

### 5.1 Summary

5.1.1 This ES Addendum has been prepared, on behalf of Veolia ES Landfill Limited, in support of a Planning Appeal ref. APP/Z1585/W/25/3370673. The Appeal relates to planning application ref. ESS/15/25/BAS, which was refused by ECC and sought:

*“Continuation of the landfill to facilitate restoration permitted by ESS/49/14/BAS without compliance with condition 4 (completion timescales), condition 5 (removal of buildings and equipment) and condition 21 (restoration scheme) to delay restoration of the composting (and proposed waste wood processing) area and access road and weighbridge facilities by 10 years. ESS/49/14/BAS was a variation permission of ESS/35/06/BAS for recontouring of the landfill to facilitate restoration.”*

5.1.2 The changes simply seek to delay the restoration of an untipped part of the landfill site by up to 10 years. The delay to restoration would facilitate the continuation of existing composting, and new waste wood processing, operations on part of the Site (which is dealt with through a separate but linked planning application / appeal).

5.1.3 No other changes to the existing operations are proposed. The existing operations would continue to operate in accordance with all of the mitigation and limits previously approved through the existing consent and the Environmental Permit, as appropriate now that tipping has ceased at the Site.

5.1.4 A review of the various assessments provided within the previous ES documents has been undertaken and no additional environmental effects have been identified to those previously assessed.

5.1.5 This ES Addendum also includes consideration of the indirect upstream and downstream effects of the Proposed Development, in line with the Finch judgement. It is concluded that there are no indirect upstream or downstream environmental effects arising from the Proposed Development which can be meaningfully assessed, or which would be shown to be significant through such an assessment.

5.1.6 The ES Addendum has considered the potential for significant adverse effects on the environment deriving from the vulnerability of the development to risks of major accidents and / or disasters. None have been identified.



## **5.2 Conclusions**

- 5.2.1 In conclusion, the assessment has shown that the proposed delay to the restoration of part of the landfill site for up to 10 years would not result in any increased or additional significant environmental effects.

