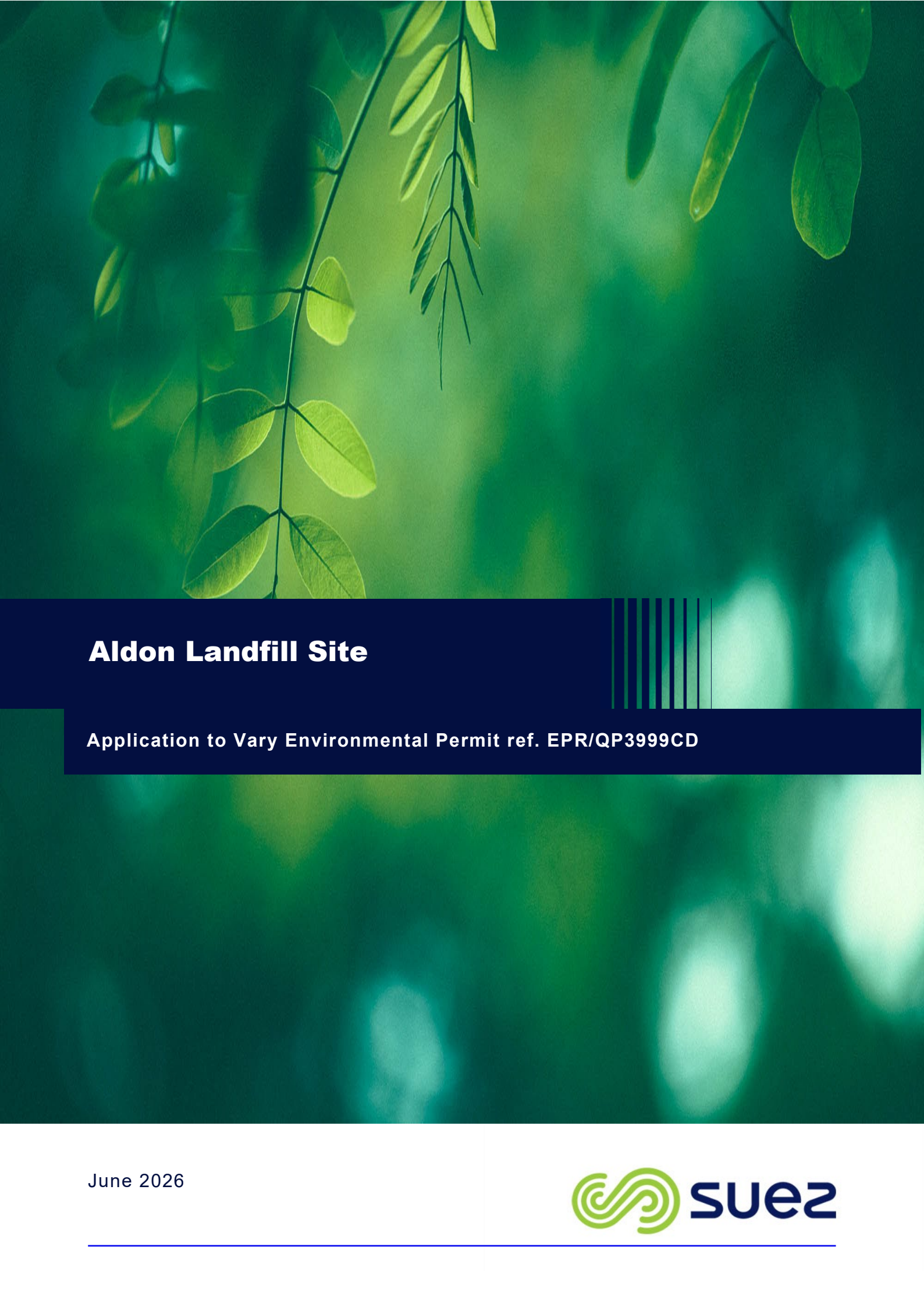
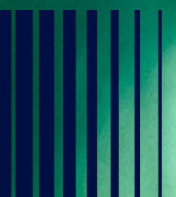




Aldon Landfill Site



Application to Vary Environmental Permit ref. EPR/QP3999CD

June 2026

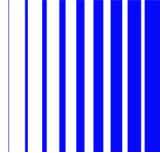


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Document Review History

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June 2026	Version 1.0	Original Document



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 - Perimeter Landfill Gas Compliance Review
 - Monitoring Management Plan



1. Non-Technical Summary

1.1. Introduction

This non-technical summary forms part of the application to vary the Environmental Permit (permit) for Aldon Landfill Site (the site) in Shropshire.

The variation application proposes two key updates to the site's permit, relating to the management and monitoring of leachate and management and monitoring of landfill gas at the Site.

Principally, the variation seeks to end the requirement to actively manage leachate at the site. Leachate is only actively managed in centre of the landfill – this being the last cell of the site that was filled in the early 1990s. An updated Conceptual Site Model and Hydrogeological Risk Assessment demonstrate that the cessation of the limited leachate management currently undertaken at the site will have negligible impact on the receiving water environment.

SUEZ has also reviewed the site's performance with respect to residual landfill gas emissions into the environment. Following years of discussion with the Area Environment Agency Regulatory Officers, a Perimeter Gas Compliance Report recommends an amendment to the way in which perimeter gas compliance is assessed and regulated.

1.2. The Site

Aldon landfill site is located north west of Aldon Village, approximately 10km north west of Ludlow, Shropshire, centred on National Grid reference SO 431 801. The site is in a rural area, neighbouring land uses comprise arable or rough grazing land with very occasional residential properties or farms. A site location plan is included as Figure 1.

The site is operated by Shropshire Waste Management Limited, a subsidiary of SUEZ Recycling and Recovery UK Ltd (referred to from here in as SUEZ), under permit reference EPR/QP3999CD.

The site accepted waste for disposal from the 1960s to 1998 and has been closed and fully restored since the early 2000s.

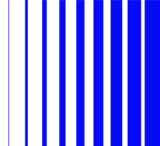
The site was issued with a Waste Disposal Licence in 1994, however the majority of waste within the site was accepted before this time; no record is retained of any environmental permit or licence in place at the site prior to 1994.

In accordance with standards of waste management from the 1960s to 1990s, the site has no basal or sidewall engineering, however the site benefits from a contemporary engineered cap across the central area of the site. Active leachate management is undertaken in one small area in the centre of the site; however, landfill gas has always been managed passively.

1.3. The Application

The key proposed amendment to the permit is to remove the requirement to actively manage leachate generated within the site. This is supported by an updated Conceptual Site Model (CSM) and Hydrogeological Risk Assessment (HRA), which have been prepared with due consideration of internal Environment Agency guidance: *Permit Variation Application: Removal of Active Management Controls at Landfills (April 2024)*.

The proposed amendment to move from active to passive management of leachate is accompanied by recommendations to strengthen groundwater and surface water monitoring provision to ensure the proposed



amendment does not have an impact on the water environment. Leachate level action limits are also proposed to ensure leachate level trends are monitored and assessed.

With the update to the site's CSM, a Perimeter Gas Compliance Review has also been undertaken, presenting a contemporary risk-based approach to the assessment of residual landfill gas emissions from the site.

Following final low permeability capping of the Site between 1998 and 2000, increased concentrations of methane and carbon dioxide were observed in some perimeter wells. This situation has continued to 2026 and has been discussed at length with the Area Regulatory Officers at the Environment Agency. It has been agreed that, in light of the adoption of contemporary, pragmatic risk based approaches to the assessment of perimeter gas concentrations at other sites, SUEZ should apply to formally vary the site's permit to replace historical concentration based trigger limits for Action Levels and Compliance Limits, with risk-based limits derived from gas screening values (taking account of both the concentration and flow of gas from a borehole).

Full details of the proposed amendments to the compliance and monitoring requirements are provided in Section 2.

1.4. Discussions with the Environment Agency

The site and its environmental performance have been discussed at length with the local Area Team at the Environment Agency. Discussions have focused on SUEZ's assessment of the risk posed by the site now and in the future and how this might be regularised in the site's permit.

The Perimeter Gas Review has been reviewed by the local Area Team at the Environment Agency ahead of this permit variation application. Copies of correspondence with the Environment Agency is included in this application in Appendix B.

1.5. Application Supporting Documentation

The permit variation application is supported by the following risk assessments and updated management plans:

- Aldon Landfill Site, Hydrogeological Risk Assessment to Support Strategic Leachate Management in Aftercare, SUEZ, 2026
- Aldon Landfill Site, Review of the Approach to Perimeter Gas Compliance, SUEZ, April 2026

The following operational techniques have been updated to support the proposed amendments:

- Aldon Landfill Site, Leachate Management Plan, April 2026 (included as Appendix B of HRA)
- Aldon Landfill Site, Proposed Monitoring Management Plan, June 2026

The risk assessments and management procedures are included in Appendix D of this application.

2. Description of Proposed Changes

2.1. Proposed Leachate Amendments

2.1.1. Move to passive leachate management

Under the extant permit issued in 1993, leachate levels within the site are managed in accordance with Condition D18, which states: *The level of leachate in pumping chambers referred to in Condition D16 shall be monitored at monthly intervals. The level of leachate in Chamber 1 shall not be allowed to rise higher than 0.5 meters above the base of that chamber. The level of leachate in chamber 2 shall not be allowed to rise above the inlet pipe invert at 234.9m AOD*

Chamber 1 is leachate well AL2/04L and chamber 2 is leachate well AL5/01L, both are located in the central area of the site.

The setting of leachate level limits for these two wells was based – as was typical for the era when leachate levels were first regulated within licences – on arbitrary low limits, rather than risk-based levels

In addition to AL2/04L and AL5/01L, there are two further leachate monitoring points within the site; AL/03L and AL/04L, both located in the southern area of the site. There are no compliance limits for these two points.

The leachate compliance requirement in the extant permit results in leachate being managed in the central portion of the site only, resulting in removal rates of approximately 600m³/year.

The impact of ceasing leachate extraction on the groundwater and surface water environment is assessed in the HRA, included in Appendix D of this application.

It is proposed that the site's leachate storage tank, compressor and leachate pumps are retained in a condition such that this infrastructure could be recommissioned if necessary.

To formalise the change from active to passive management of leachate, SUEZ propose that the leachate level compliance limits in the permit are removed. Action levels (set out in the site's Monitoring Management Plan not the permit) are proposed to facilitate ongoing monitoring and assessment of leachate level trends.

2.1.2. Revision in leachate quality monitoring schedules

With leachate quality at the site having been monitored for approximately thirty years, leachate quality is very well understood. As detailed in the HRA it is therefore deemed appropriate to rationalise leachate quality monitoring from four sampling locations to one.

2.2. Proposed Groundwater and Surface Water Amendments

It is proposed to revise the monitoring frequency of groundwater down-gradient of the site to reflect the possible transition period associated with the ending of leachate management. Quarterly groundwater quality sampling is proposed for a period of six years post leachate management cessation.

Further, it is deemed appropriate to introduce groundwater Action Levels for the two key landfill emission substances, ammoniacal nitrogen and chloride, in all downgradient points, in order to appropriately monitor and assess any potential impacts.



Similarly, it is proposed that surface water monitoring provision be strengthened in response to leachate management cessation. One further surface water monitoring point is proposed, and the frequency of surface water quality monitoring will be increased to quarterly.

The proposed amendments to the monitoring and assessment programme for leachate, groundwater and surface water are presented in the Hydrogeological Risk Assessment and Proposed Monitoring Management Plan.

2.3. Proposed Perimeter Gas Amendments

In reviewing the way in which perimeter gas is monitored and assessed at the site, SUEZ has defined a contemporary Conceptual Site Model (CSM) for source, pathway, and receptor linkages, undertaken a full data review and quantification of risk, presented proposals for the appropriate update of perimeter gas compliance assessment at the Site and proposed updated requisite surveillance for the Site.

The Perimeter Gas Compliance Review discusses that, based on the updated Conceptual Site Model, assessing the site based on 'concentration only' limits is not an appropriate method to regulate the site.

Two approaches to future regulation of the site are proposed:

- Approach A: Appropriate Adoption of Risk Based Principles for Gas Compliance in the Perimeter Network around the site.
- Approach B: Appropriate Adoption of Risk and Concentration Based Principles for Gas Compliance in the Perimeter Network around the site.

Approach A is SUEZ's preferred approach and has also been endorsed by the Environment Agency Area Team.

In summary, Approach A includes:

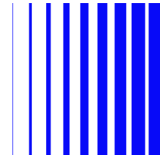
- The replacement of 'concentration only' trigger limits with Action Levels and Compliance Limits based on hazardous gas flow rate.
- There is no proposed amendment to the frequency of perimeter gas monitoring.
- The removal of monitoring points AL/01 and AL/17 from the network as they are not fit for purpose; re-drills are not proposed due to the extensive monitoring network present.
- Contingency actions in the event of an exceedance of an Action Level or Compliance Limit are proposed.

The proposed amendments to the monitoring and assessment programme for perimeter gas are presented in the Review of the Approach to Perimeter Gas Compliance and Proposed Monitoring Management Plan.

2.4. Reporting Proposals

SUEZ propose that for 3 years following approval of the permit variation, an annual interpretive report will be submitted to the Environment Agency by 30 April each year, covering a reporting period of 1 January to 31 December. Thereafter, interpretive reporting will take place on a 3-yearly basis, to the same reporting periods and deadlines.

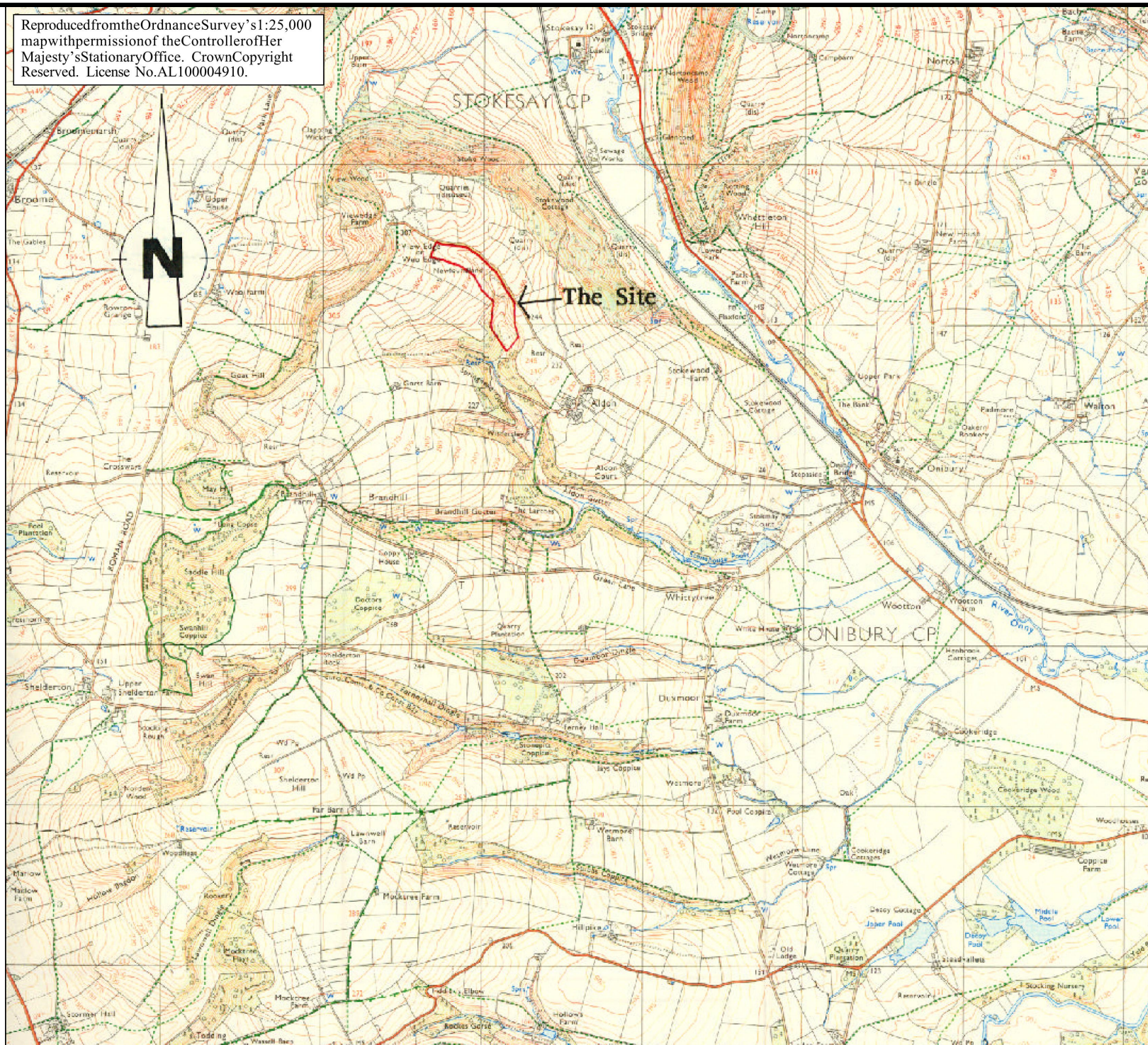
A full HRA Review is scheduled for 2032.



Figures

Figure 1 Site Location Plan Ald-LOC-0417-01

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Notes

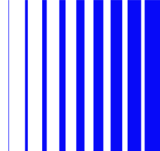
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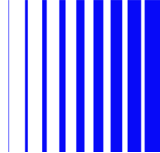


Darwin Resource Recovery Park, Lower Ecclehill Road, Darwen, BB3 0RP
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Site	Aldon Landfill Site	
Title	Site Location Plan	
Scale	See Grid	
Date	April 2017	
Drawing Ref	Ald-LOC-0417-01	Drawn by RB
		Checked by HJ

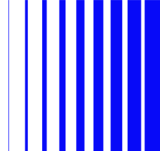


Appendices

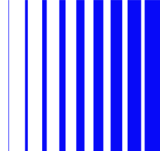


Appendix A Application Forms:

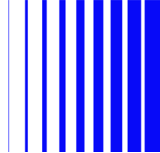
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Appendix B Discussions with the Environment Agency



Appendix C Operator Ability – Management Systems



Appendix D Risk Assessments and Operating Techniques:

- Hydrogeological Risk Assessment, including Leachate Management Plan
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