



Retford Circular Economy Project Environmental Statement Addendum – Volume 3 Technical Appendices

Technical Appendix 13.6: Updated Dust
Impact Assessment

January 2024

Project No.: 0695864

Document details	
Document title	Retford Circular Economy Project Environmental Statement Addendum - Volume 3 Technical Appendices
Document subtitle	Technical Appendix 13.6: Updated Dust Impact Assessment
Project No.	0695864
Date	January 2024
Version	1.0
Author	Environmental Resources Management
Client Name	Lound Hive Limited

RETFORD CIRCULAR ECONOMY PROJECT

Dust Impact Assessment - Addendum
Prepared for: **Lound Hive Limited**

SLR Ref: 416.V5954400001
Version No: 1
December 2023



BASIS OF REPORT

This document has been prepared by SLR with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Lound Hive Limited (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

ADDENDUM

Following the submission of the Dust Assessment in February 2023, Lound Hive Limited (LHL) has made a number of revisions to the extraction scheme which are deemed beneficial with regard to dust emissions and dust management. Following the amendments to the operations and dust control measures, the conclusions of the assessment are considered to remain the same, in that the operations would result in a ‘not significant’ effect with regard to dust impacts in the Site locale.

The principal changes to the Proposed Development with regard to its potential for dust generation are summarised below in Table 1.

Table 1: Amendments to Working Scheme

February 2023 Submission	October 2023 Revision	Impact on Dust Assessment
Extraction Area A split into 11 working phases	Extraction phases further divided into smaller Micro-Phases of 0.5 – 1.0 ha (<1% of total extraction area)	Beneficial Reduced spatial extent of dust source (soil stripping, extraction and exposed ground)
Extracted PFA transferred to fixed Pre-Processing Area (Temporary Processing Areas 1-3) in articulated dump trucks on unpaved haulage routes	Mobile Screening plant located in proximity to working face; relocated as extraction progresses	Beneficial Reduction in dust source and reduced onsite haulage movements on unpaved roads.
Three semi-fixed Pre-Processing Areas of 3,000 – 6,000m ² (Temporary Processing Areas 1-3) comprising storage, screening and crushing plant	One single mobile screen that would be relocated with the active working face, located a minimum of 100m from Site boundary Mobile screen plant would move along working face as extraction progresses, located within extraction void	Beneficial Reduced spatial extent of dust source, increased distance to receptor: material deposited directly into reception hopper at working face. Location within extraction void would ensure embankments utilised for screening
Soils stripped and stored in centralised area	Soils stripped from each Micro-Phase would be stored within active phase for use in progressive replacement. Storage of soils in long-term soil store would be a contingency measure when absolutely necessary. Storage areas and bunds would be seeded with wildflower mix	Beneficial Reduction in dust source: reduced onsite haulage movements on unpaved routes and stable storage locations
PFA stockpiling (extracted): within the Pre-Processing Area, maximum footprint of 2,000m ² (total of extracted and post-screening PFA)	Extracted PFA stored on a temporary basis for acceptance inspection prior to being fed into pre-screening hopper. Maximum stockpile: 150m ² , 3m high, impermeable base.	Beneficial Reduction in dust source: significant reduction in stockpile size of extracted PFA.

February 2023 Submission	October 2023 Revision	Impact on Dust Assessment
PFA stockpiling (post-screening): within the Pre-Processing Area, maximum footprint of 2,000m ² (total of extracted and post-screening PFA)	Transferred directly from screen into conveyor hopper for enclosed transfer to Material Storage Building. Or, if there is a requirement for stockpiling then Maximum stockpile: 150 m ² , 3 m high, impermeable base.	Beneficial Removal of dust source: no requirement to stockpile screened PFA, fed directly to Material Storage Building. Restrictions on stockpiling magnitude and location.
Oversized PFA from Screen Plant stockpiled within the extraction area	Oversized PFA from Screen Plant stockpiled in single designated area within extraction area, >100m from Site boundary with a maximum footprint of 150m ² x 3m high.	Beneficial Restrictions on stockpiling magnitude and location

Changes to the Assessment:

The following additional control measures have been recommended for implementation, all of which are detailed within the Dust Management and Monitoring Plan (DMMP), see Appendix 13.7)

- Additional screening along northern and southern boundary for the duration of extraction activities in the Low-Rise, increasing screening to around 5m at locations closest to sensitive receptors (combination of working depth and screen bunds/fencing);
- A sealed screening bund would remain along the western boundary of each of the phases until extraction has been complete, ensuring the working phases are not susceptible to prevailing winds from the west;
- Working area to be dampened down during extraction activities and sealed with soil cement (or similar) or compacted overnight and on weekends during period of dry weather ('dry days' = days with <0.2mm rainfall);
- Unvegetated areas of soil to be dampened down twice daily on 'dry days';
- Automated fogging dust suppression system installed, operating 24/7 when insufficient rainfall and / or high winds that would cover extraction, screening and PFA stockpiling areas;
- A dust monitoring scheme for dust deposition off-site (see the Dust Management and Monitoring Plan); and
- A series of contingency measures, as detailed in the DMMP.

The amendments to the working scheme as detailed in Table 1 are all considered to be beneficial, with significant reductions in terms of the potential for dust emissions when compared to the original scheme. All other aspects of the working scheme are considered to remain the same.

Taking into account the reduction in dust potential from the changes to the working scheme together with the additional dust control and management measures proposed, the overall conclusion of the original assessment of a 'not significant' effect with regard to dust impacts is considered to remain.

EUROPEAN OFFICES

AYLESBURY

T: +44 (0)1844 337380

BELFAST

belfast@slrconsulting.com

BIRMINGHAM

T: +44 (0)121 2895610

BONN

T: +49 (0)176 60374618

BRADFORD-ON-AVON

T: +44 (0)1225 309400

BRISTOL

T: +44 (0)117 9064280

CARDIFF

T: +44 (0)2920 491010

CHELMSFORD

T: +44 (0)1245 801630

CORK

T: ++353 (0) 21 240 9000

DUBLIN

T: +353 (0)1 296 4667

EDINBURGH

T: +44 (0)131 335 6830

EXETER

T: +44 (0)1392 490152

FRANKFURT

frankfurt@slrconsulting.com

GLASGOW

glasgow@slrconsulting.com

GRENOBLE

T: +33 (0)6 23 37 14 14

KILKENNY

kilkenny@slrconsulting.com

LEEDS

T: +44 (0)113 5120293

LONDON

T: +44 (0)203 8056418

MAIDSTONE

T: +44 (0)1622 609242

MANCHESTER

T: +44 (0)161 8727564

NEWCASTLE UPON TYNE

T: +44 (0)1844 337380

NOTTINGHAM

T: +44 (0)115 9647280

SHEFFIELD

T: +44 (0)114 2455153

SHREWSBURY

T: +44 (0)1743 239250

STIRLING

T: +44 (0)1786 239900

WORCESTER

T: +44 (0)1905 751310

**ERM has over 160 offices across more 40
countries and territories worldwide**

ERM's York Office

1C Swinegate Court East

3 Swinegate

York

YO1 8AJ

T: +44 1904 715470

www.erm.com