
**Daneshill Landfill Site and Maw Green
Landfill Site**

**APPEALS PURSUANT TO REGULATION 31 OF THE
ENVIRONMENTAL PERMITTING (ENGLAND AND WALES)
REGULATIONS 2016**

**REGARDING DANESHILL SOIL TREATMENT FACILITY
AT DANESHILL LANDFILL SITE AND MAW GREEN
LANDFILL SITE**

APPEAL REFS: APP/EPR/636, 651 & 652

CONJOINED RULE 6 STATEMENT

**ON BEHALF OF FCC RECYCLING (UK) LIMITED and 3C
WASTE LIMITED**

1. INTRODUCTION

- 1.1. Freeths LLP is instructed to act on behalf of FCC Recycling (UK) Limited and 3C Waste Limited (“the Appellant”), in relation to three conjoined appeals pursuant to Regulation 31 of The Environmental Permitting (England and Wales) Regulations 2016 (“the Regulations”). FCC Recycling (UK) Limited and 3C Waste Limited are subsidiaries of Fomento de Construcciones y Contratas and therefore will be described as ‘FCC’ in the rest of this document.
- 1.2. The Appellant is appealing:
 - 1.2.1. the Environment Agency’s (“the EA”) refusal of an application to vary Environmental Permit reference EPR/NP3538MF (“the DH EP1”), to allow for the treatment of asbestos contaminated soils at Daneshill Landfill Site (“the DH Site”) (“Appeal One”);
 - 1.2.2. conditions imposed by the Regulator Initiated Variation of the Environmental Permit for the Site, issued on 29 September 2023, under reference EPR/NP3538MF/V010 (referred to hereafter as “the DHEP2”) (“Appeal Two”); and appealing conditions imposed by the Regulator Initiated Variation of the Environmental Permit for the Maw Green Landfill Site (“MG Site”), issued on 5 October 2023, under Reference EPR/BS7722ID/V010 (referred to hereafter as “the MGEP”) (“Appeal Three”).
- 1.3. The determination of all three appeals require the consideration of materially similar issues and relate to the decision of the EA to either: i) refuse to grant an environmental permit for activities relating to the treatment of soils contaminated with bound asbestos materials; or ii) to grant permits for the treatment of soils contaminated with bound asbestos materials subject to unreasonable permit conditions and restrictions.
- 1.4. It should be noted that a separate Rule 6 Statement was previously submitted by FCC in respect of Appeal One, as chronologically, DH EP1 was issued by the EA first. When the Appellant submitted its Rule 6 Statement for Appeal One, it drew the EA’s attention to the fact that it had issued a permit for ACM activities at Maw Green, which directly conflicted with its decision to refuse a permit for ACM activities at Daneshill.

- 1.5 Since then, the EA issued, by way of regulator initiated variations, DH EP2 and the MG EP. In respect of Maw Green, the issue of the MG EP effectively revoked the permit previously granted in July 2023 (V9) requiring the Appellant to cease all activities at the Maw Green Site only three months after those activities had been permitted. FCC lodged appeals against the conditions imposed by both of those permits resulting in Appeal One, Appeal Two and Appeal Three being conjoined (“the Appeals”).

2. THE APPEAL SITES

Daneshill

- 2.1. The DH Site is an existing non-hazardous waste landfill which is undergoing restoration. The landfill operates pursuant to a ROMP¹, which will expire in 2048. The Appellant’s restoration scheme for the landfill anticipates that restoration of the landfill void will be complete within 10 years (subject to sufficient waste arisings, including hazardous waste to be pre-treated at the Site prior to use in the restoration of the landfill). The Site is located at Daneshill Rd, Retford DN22 8RB.
- 2.2. Full details of the DH Site and its surroundings will be provided in the Appellant’s expert evidence and the Statement of Common Ground (“SoCG”). Details of sensitive receptors will be set out in the Appellant’s expert evidence and it is noted that these are slightly different from those set out in the application documents which were submitted in support of the application for DH EP1. This difference is not material and arises from a slightly different approach to the point at which measurements are taken. The measurements in the Appellant’s expert evidence should be used moving forward.
- 2.3. The MG Site is an existing non-hazardous waste landfill which is undergoing restoration. The MG Site and soil treatment facility is operated by 3C Waste Limited, a wholly owned subsidiary of FCC. The landfill site is partially completed and areas are currently awaiting restoration. MG Site is located off Maw Green Road, Coppenhall, Crewe, Cheshire, CW1 5NG. The southern boundary of the MG Site is located approximately 2km north of the centre of Crewe (i.e. on the outskirts of Crewe). The MG Site is centred on national grid reference SJ 71859 57401. The MG Site is in a low-lying area, with general ground elevations around 45m Above Ordnance Datum (AOD). The MG Site is in a predominantly agricultural setting on the north-eastern outskirts of the town of Crewe. As is the case with the DH Site,

¹ Review of Old Minerals Permission

residential properties are located within 500 metres of the proposed STF boundary at the MG Site and will be set out in the Appellant's evidence.

3. PROCEDURAL BACKGROUND

3.1. An overview of the relevant procedural background to the Appeals is set out in the relevant Grounds of Appeal documents ("GoA") and will not be repeated here in full. However, it is important to note that in relation to the MG Site, the EA issued a permit for the proposed activity ("V9 Permit"), which it then revoked by way of a regulator initiated variation once the V9 Permit was drawn to their attention following service of the grounds of appeal in relation to Daneshill.

3.2. In so far as is required, the procedural background to the Appeals will be addressed in the SoCG and/or the Appellant's expert evidence.

3.3. It is however useful to emphasise the following in relation to the Appeals:

3.3.1. Landfilling has ceased and the landfill is therefore in the final restoration phase;

3.3.2. The purpose of the STF's is to reclaim soils for use in the restoration of the landfill;

3.3.3. Once the landfills at the DH Site and the MG Site respectively has been restored, the relevant STF will cease to operate;

3.3.4. If ACMs are permitted for treatment at the STF (without the imposition of the conditions under appeal) it is expected that the landfill at the DH Site will be fully restored within a 10 year period;

3.3.5. If ACMs are permitted for treatment at the STF (without the imposition of the conditions under appeal) it is expected that the landfill at the MG Site will be fully restored by 2027;

3.3.6. The life of the STFs is therefore directly related to the time required to restore the landfill at the DH Site and the MG Site. They will not be permanent installations. Their removal will be controlled by the planning regime.

4. BACKGROUND AND DETAILS OF THE PROPOSED ACTIVITY

4.1. An overview of the Proposed Activity at the DH Site and the MG Site is set out in the relevant GoAs. The Proposed Activity which is at the heart of the Appeals is materially the same for Appeal One, Appeal Two and Appeal Three.

- 4.2. It should be noted that an amendment is required to paragraph 6.20.2 of the GoA submitted for Appeal One in that any reference to the HEPA filter/covering of the mechanical screener should be deleted. This issue will be addressed in more detail in the Appellant's evidence. However, it should be noted that the proposal to partially enclose the screener and utilise a HEPA filter at the DH Site arose during the determination of the Application, as a result of the Appellant trying to meet the EA's concerns, rather than considering it a requirement of BAT. Since then, further investigation and practical testing has confirmed that it is not possible to enclose the mechanical screener and the Appellant does not propose that the mechanical screener will be enclosed and/or fitted with a HEPA filter.
- 4.3. A detailed description of the Proposed Activity will be set out in the Appellant's expert evidence. The Appellant's evidence will include references to key documents, relevant plans and schematics which will illustrate the stages of the Proposed Activity alongside the operational management controls which will be deployed to prevent and/or minimise any emissions of asbestos fibres. Although there will be different reference documents in respect of the DH Site and the MG Site, which reflect the fact that two separate permits are required (one for each site) the same processes and operational management controls are proposed.
- 4.4. The Appellant's evidence will, where relevant, make reference to and draw upon similar activities at other sites which are operated by FCC/Provectus. In particular, the Appellant intends to refer to activities and monitoring data from its mobile permit operations at Edwin Richards Quarry. Where other sites are referred to in the Appellant's evidence, detail will be provided regarding the nature of the activities undertaken at those other sites in order to ensure accurate information is available to the Inspector regarding the comparability of technical data arising from those sites.
- 4.5. DH EP1, DH EP2 and the MG EP were granted by EA in accordance with the details submitted for non ACM related activities and accordingly the EA is satisfied that the Appellant complied with BAT in respect of all other activities to be undertaken at the STFs, including the appropriate management of deposited (ie dis-amenity) dust and smaller particular emissions (for example PM10, PM2.5) from the treatment of hazardous waste for use in the landfill restoration scheme.
- 4.6. As granted by the EA, the MG EP permits the STF at the MG Site to treat up to 50,000 tonnes of hazardous waste for treatment at the STF, for use in the wider landfill restoration at the MG Site. Save for in the case of ACMs, the MG EP has been

granted by the EA in accordance with the details submitted and accordingly the EA is satisfied that the Appellant has complied with BAT in respect of all other activities to be undertaken at the STF, including the appropriate management of deposited (ie dis-amenity) dust and smaller particular emissions (for example PM10, PM2.5) from the treatment of hazardous waste for use in the landfill restoration scheme. The recovered materials, post treatment at the STF, will be used as part of the restoration of the landfill.²

- 4.7 In the event that treatment of ACMs cannot be undertaken at the STFs, for re-use in the restoration of the landfill at the DH Site and MG Site, this waste stream will have to be sent to hazardous waste. The opportunity to efficiently recover and recycle the soil, in accordance with the waste hierarchy, to enable the restoration of the landfill at the DH Site and MG Site, would be lost. There is a defined need in the local construction industry in both localities for a compliant and cost-effective treatment solution for ACMs.
- 4.8 The importation of ACMs and their remediation via the STFs for reuse in restoring the landfill at the MG Site and DH Site is a key aspect of securing the full completion of the landfill.. Without the availability of these materials, once recovered through treatment at the STFs, the timescale for the restoration of both landfills will be adversely impacted increasing the environmental risk, and delaying the benefits that will flow from the creation of the final restoration scheme.
- 4.9 The Proposed Activity at the DH Site and the MG Site would be undertaken on behalf of the Appellant by Provectus Soil Management Limited (“Provectus”). Provectus specialise in the remediation of contaminated soils including ACMs and (amongst other sites) have operated a soil treatment facility under a mobile plant permit (issued by the EA) deployed for the remediation of ACMs at the MG Site. That mobile licence operation used precisely the same methodology as is now proposed for the DH Site and the MG Site. Detailed monitoring has been undertaken regarding asbestos emissions which may arise from the Proposed Activity during the life of the mobile facility, which have demonstrated that the risks to the environment and human health are negligible.

² It should be noted that the description of the treated hazardous waste in table S1.1, AR7, to be used as, “as cover” on the landfill is entirely inaccurate. Land filling activities at the Site have ceased and the landfill is in its restoration phase; there is no need or requirement for ‘cover’ when waste is no longer being deposited. The recovered materials, post treatment at the STF, will be used as part of the restoration of the landfill.

- 4.10 The proposed operational controls for the STFs at the DH Site and the MG Site are materially the same. A detailed overview of the procedures for the MG Site and the DH Site will be provided in the Appellant's evidence to the appeal.
- 4.11 In support of the Appeals, the Appellant's expert evidence will provide full and comprehensive details of the Proposed Activity at the DH Site and the MG Site, drawing upon and referring to the details submitted with the MG Application and the DH Application. The Appellant's evidence will further elucidate and support the Appellant's case demonstrating that the Proposed Activity at the DH Site and the MG Site will if granted on appeal, be fully compliant with the relevant requirements of BAT.
- 4.12 Furthermore, the Appellant will adduce expert evidence to provide an overview of the need for the remediation of ACMs in the UK, so as to preserve hazardous landfill waste capacity in the UK and ensure the wider objectives of the waste hierarchy and hazardous waste regulation are secured. The Appellant's expert evidence will provide a review of current working practices which are frequently deployed in England and Wales, to recover ACMs to demonstrate that the Proposed Activity is in full accordance with best practice and industry standards.

5. EA DECISION DOCUMENTS

- 5.1. The EA's Reasons for Refusal (Appeal One) and reasons for imposing conditions on the regulator initiated permits for the DH Site and the MG Site (Appeal Two and Three) are set out in full in the respective GoAs and will not be repeated here. The EA's rationale as set out in the relevant Decision Documents will be addressed in detail in the Appellant's evidence.

6. STATEMENT OF CASE

- 6.1. There is a high degree of commonality in the Appellant's case for the Appeals. The following points will be addressed by the Appellant's evidence in respect of Appeal One, Appeal Two and Appeal Three. The Appellant's evidence will clearly identify any differences between the cases being advanced in respect of the DH Site and the MG Site, which arises from the slightly different configuration/layouts of the respective STFs and the varying sensitive receptors for each location.

- 6.2. Expert evidence will be adduced by the Appellant in respect of the Appeals which will address:
- 6.2.1. The correct interpretation, requirements and application of BAT, including the relevance of the WFD and Article 11 of the IED;
- 6.2.2. A detailed assessment of the Proposed Activity and the proposed operational controls which will be deployed and their compliance with BAT;
- 6.2.3. The need for the Proposed Activity and the wider environmental context in support of the Appeal including the need to protect hazardous waste landfill capacity;
- 6.2.4. Whether the Proposed Activity will be likely to give rise to significant pollution. The Appellant will demonstrate that the Proposed Activity will not give rise to significant pollution and any risks arising from the Proposed Activity will be negligible. Expert evidence will be called to assess and quantify the risk arising from the treatment of asbestos contaminated soils as a result of the Proposed Activity and will include:
- 6.2.4.1. A detailed review of the evidence base regarding the risks arising from the treatment of asbestos contaminated soils, in particular relating to soils contaminated with bound asbestos;
- 6.2.4.2. Best practice when treating asbestos contaminated soils and their application/relevance to the Proposed Activity at the DH Site and the MG Site;
- 6.2.4.3. Detailed analysis of the critical factors which determine the risks of asbestos fibres from the treatment of asbestos contaminated soils and how these relate to the Proposed Activity at the DH Site and the MG Site;
- 6.2.4.4. Assessment of the results of extensive asbestos fibre monitoring data from comparable sites and processes;
- 6.2.4.5. Detailed analysis of the emissions which are likely to arise from the Proposed Activity at the DH Site and the MG Site, the risk of any such emissions to relevant sensitive receptors, demonstrating that the risks are negligible, even when sensitivity tests are applied so as to result in a conservative 'worst case' assessment.
- 6.3 Further particularisation of the Appellant's case is provided below.

7. ASBESTOS EMISSIONS FROM THE TREATMENT OF ASBESTOS CONTAMINATED SOILS

- 7.1. Expert evidence will be adduced to assess and fully contextualise the likelihood of asbestos fibre emissions from the Proposed Activity at the DH Site and the MG Site. The factual data which will be relied upon by the Appellant is materially the same for Appeal One, Appeal Two and Appeal Three. The data will however be utilised to produce bespoke assessments which reflect the different locations of the DH Site and the MG Site.
- 7.2. An overview of the types of asbestos fibres, and the varying degrees of risk they pose will be provided with reference to the type of asbestos which will be treated by the Proposed Activity at the DH Site and the MG Site.

Asbestos fibre emissions from material processing

- 7.3. The Proposed Activity at the DH Site and the MG Site is for the acceptance of soils contaminated with bonded or bound asbestos containing materials (ACMs). The proposed activity excludes the acceptance of soils with concentrations of fibrous asbestos above a threshold of 0.1% for chrysotile and 0.01% for amphiboles. The materials accepted for treatment at the facility therefore are expected to contain low quantities of free asbestos fibres upon receipt. The assessment of the risks of release of asbestos fibres to air is primarily associated with the potential for the increase in concentrations of free fibres in the soil such as from abrasion of the ACMs during the transfer of the soils and ACMs in bulk and via conveyors and as a result of the mechanical screening process.
- 7.4. The Appellant's expert evidence will consider and address the potential of the disturbance of asbestos³-containing soils to release asbestos fibres into the air. This is a well-established issue that has been addressed by UK and international guidance (both from a regulatory and an industry perspective). There are a number of factors that have been shown to influence the emission of asbestos fibres from soil, and the actual release of asbestos fibres from soil at a site-specific level is a complex function of these factors.

³ The term 'asbestos' refers to all types and forms of asbestos that are identifiable either by visual on-site inspection and/or by laboratory analysis. This can include fragments of ACMs, loose fibrous debris, fibre bundles and free fibres. The term 'asbestos fibres' refers to free fibres only.

- 7.5. Critical factors in asbestos fibre release include the soil moisture content, the degree of soil disturbance/agitation, physical soil characteristics (such as particle size distribution), the type and form of the asbestos, and the concentration of the asbestos in the soil.
- 7.6. Whilst the hazard of potential asbestos fibre emission to air is associated with the presence of asbestos in soil, the Appellant's evidence will demonstrate that the risk of airborne fibre emission can vary greatly dependent on the site-specific conditions. Published approaches for the estimation of airborne fibre release from soil and calculation of the associated health risk from human exposure to airborne asbestos fibres in non-occupational scenarios are summarised in the Society of Brownfield Risk Assessment (SoBRA)'s Asbestos in Soil Human Health Risk Assessment Toolbox (SoBRA, 2021a). These will be referred to and considered in the Appellant's expert evidence.
- 7.7. An initial screening of potential fibre emissions associated soil movement and treatment activities can be made using the US EPA AP-42 guidance (US EPA, 2006). The air pollutant emission factors developed in this guidance are generic but are modified by a number of site-specific activity parameters. The relevant activities envisaged at the STF are: (1) haulage of waste soil to the STF by 20 tonne tipper trucks, (2) stockpile management of pre- and post-processed soil by 360 excavator, bulldozer, and 25 tonne dumper truck, (3) mechanical screening of soil, (4) transfer to picker belt and hand picking of soil, (5) haulage of processed soil material away from STF. Use of the AP-42 emission calculations indicate that the greatest emission activities are likely to be vehicle movement on the concrete slab, and mechanical screening. Accordingly, other emission activities are likely to be insignificant by comparison.
- 7.8. In terms of the overall emissions, it is noted that the screener operation is likely to be relatively continuous throughout a working day. Vehicle movements will be more sporadic and of comparatively short duration. The relative contribution from wind erosion is not expected to be significant.
- 7.9. There are inherent uncertainties in the indirect estimation of airborne asbestos fibre emissions from soil disturbance activities, and activity-based sampling ("ABS") can provide valuable direct evidence of asbestos fibre release. Provectus has undertaken daily air monitoring of its asbestos containing soil processing activities at two similar soil treatment facilities, at the MG Site, and at FCC's Edwin Richards Quarry landfill

site at Rowley Regis near Wolverhampton. The activities and soil acceptance criteria for these two sites are similar to those proposed for the DH Site.

- 7.10. In addition to permit-compliance air monitoring using 'standard' HSG248 air monitoring methods, Provectus has also undertaken air monitoring to a lower limit of quantification and that is capable of fibre discrimination. The additional ABS was designed to monitor source emissions during the soil processing operation, and the data indicates that quantifiable fibre emissions are infrequent and fall significantly below the environmental permit requirements for airborne asbestos concentrations measurable at the site boundary.
- 7.11. The ABS data for the Maw Green Soil Treatment Facility (STF) (operating under a mobile permit) comprises 342 single point daily air samples taken across the period 15 August 2022 to 09 June 2023 that have been taken close (i.e. within 5m) to the mechanical screener used to segregate the as received soil into three size fractions prior to further treatment. No dust emission controls are fitted to this screener. All soil processing to date was undertaken outdoors at Maw Green.
- 7.12. The air monitoring data for Edwin Richards Quarry (ERQ) STF (gathered from soil processing activities undertaken in accordance with a mobile permit) comprises 745 daily samples taken across the period 14 January 2022 and 30 June 2023, predominantly within the processing building during processing activities, and also on occasion within the storage pad. Of note, the processing activities are undertaken indoors at ERQ, and the processing activities have varied over the monitoring period, with the screener either uncovered, partially covered and with a HEPA filter⁴, or not in operation.
- 7.13. The Appellant's evidence will provide a detailed assessment of the monitoring data obtained at Maw Green and ERQ and will demonstrate that:
- 7.13.1. Sampling was undertaken during periods of work when no dust suppression was in operation, therefore the data is indicative of reasonable worst case in this respect.

⁴ It should be noted that this reference to a screener being covered and fitted with a HEPA filter is a reference to the Appellant's trial, carried out at its ERQ site, to operate a screener with partial enclosure. The trial was not successful. The Appellant has been unable to locate any screener which is available on the market which has 'covers' and/or is partially enclosed.

- 7.13.2. Quantifiable levels of airborne asbestos fibres (i.e. equal to or greater than 0.0005f/ml) were detected at the MG Site on 7 occasions (2.4% of ABS samples). Asbestos fibres were not detected at all in 84% of ABS samples, therefore fibres were detected, but below the limit of quantification, in 13.6% of ABS samples. The maximum reported airborne asbestos fibre concentration was 0.0015f/ml.
- 7.13.3. Quantifiable levels of airborne asbestos fibres were detected at ERQ on 19 occasions (3% of ABS samples). Asbestos fibres were not detected at all in 77% of ABS samples, therefore fibres were detected, but below the limit of quantification, in 23% of ABS samples. The maximum reported airborne fibre concentration was 0.001f/ml.
- 7.13.4. Reported near-source air concentrations recorded at similar activities to those proposed, with similar types of controls and mitigation applied, are consistently very low. Very few airborne fibres are detected, and quantifiable concentrations are infrequent. On all the infrequent occasions when quantifiable concentrations of fibres were detected, the results were below the EA and HSE guidance threshold concentrations.
- 7.14. Reference will be made to the following guidance in order to quantify the materiality of the emissions as follows:
- 7.14.1. The Environment Agency permit requirement for the installation permit at ERQ is for air concentrations to remain below 0.01f/ml at the monitoring locations identified in the permit;
- 7.14.2. The Control Limit and Short-Term Exposure Level set by the Control of Asbestos Regulations (CAR) 2012 for airborne asbestos concentrations are 0.1f/ml and 0.6f/ml respectively;
- 7.14.3. The HSE advocates a monitoring LOQ of 0.002-0.005f/ml for perimeter monitoring (HSG248, 2013. Appendix 8, Table 5.2); and
- 7.14.4. Environment Agency guidance for monitoring at waste facilities (M17) (EA, 2013) advocates that asbestos should not be found above background levels.
- 7.15. Further analysis will be undertaken to indicate the degree of correlation between reported asbestos soil concentrations, process activity, and weather conditions at the time of monitoring. The Appellant will provide the results of this further analysis and rely upon the same as part of the evidence it adduces in support of the Appeal.

- 7.16. In its interpretation of soil investigation results for assessing the risk specifically to workers, the HSE states in its latest guidance (HSG248, 2022) that airborne fibre concentrations are unlikely to exceed 0.01f/ml where the asbestos in soil is mostly bound/bonded and at concentrations <0.1% wt/wt (section 7.21). It goes on to state in section 7.22 that more energetic processes (including power screening of soils) may give rise to elevated fibre levels, especially if the material is dry, however, when the soil is damp or wet, it states that airborne emissions of asbestos will be suppressed and wind dilution and dispersion of emissions will reduce worker and bystander exposures.
- 7.17. The monitoring at Maw Green and ERQ supports the HSE's guidance which states that airborne fibre concentrations are unlikely to exceed 0.01f/ml, and indicating that in practice airborne concentrations are likely to be substantially lower than 0.01f/ml even when more energetic processes such as power screening are in operation. The Appellant will therefore demonstrate that the risk of any material level of emissions arising from the Proposed Activity at the DH Site and the MG Site is low and/or negligible.

Presence of loose asbestos fibres in processed soil and associated hazard potential

- 7.18. The Appellant's evidence will consider and evaluate the available validation soil sample data for the material processed at the Maw Green and ERQ STFs between 19 September 2019 and 05 May 2023. Data from 76 soil samples is available from Maw Green and 278 samples from ERQ, and represents treated soil that originated from 431 different sites/projects across the UK. The data provides a reasonable indication of the type of material being generated at remediation sites in the UK and being accepted and treated by FCC/Provectus.
- 7.19. The soil data is either from the finer separated soil fraction post screening or from the finer fraction of unscreened, picked material dependent on the processing operations in use at the time of sampling. Post-processing, this material is less likely to contain fragments of ACM (certainly not fragments that are visible with the naked eye as opposed to under a microscope) and is most likely to contain the loose fibre bundles and loose fibres that were present in the originally received material. All laboratory test results are UKAS accredited.
- 7.20. The data demonstrates that the majority of processed soil has an asbestos concentration that is below the analytical limit of quantification. Where higher

concentrations are reported, other samples for the processed material from the same site of origin report lower concentrations. The Appellant will reference this data to demonstrate that there are not continuously elevated soil concentrations in processed material following soil screening. Accordingly, the Appellant will rely upon this data as further evidence to support its case that the risk of any material level of emissions arising from the Proposed Activity at the DH Site and the MG Site is low.

Potential for material processing to increase loose, free fibre concentrations in the soil

- 7.21. The Appellant's evidence will address the limitations of available soil data in determining whether processing increases the respirable fibre concentration of the material. The majority of the reported post-treatment soil validation concentrations are less than the limit of quantification for current commercially available UKAS-accredited test methods and therefore any attempt to distinguish between pre- and post-processed data would be subject to significant sampling and analytical error.
- 7.22. The Appellant will refer to and rely upon the activity-based sampling published by the Dutch Institute of Public Health and the Environment (RIVM, 2003) which indicates that disturbance of soil containing less than 1%wt/wt 'bound' asbestos (e.g. asbestos cement) did not create detectable concentrations of asbestos fibres in air (in this case the detection limit was 0.001f/ml (1000 f/m³) by transmission electron microscope). This conclusion was based on a reported dataset of over 1000 measurements. The authors of the same Dutch guidance also concluded that the respirable fibre concentration in soil containing fragments of bound asbestos is 'nil' (less than 0.1% of the total asbestos soil concentration). This conclusion was based on 10 years of soil test data.
- 7.23. The Institute of Occupational Medicine ("the IOM") conducted an assessment of fibre release from farm tracks in South Cambridgeshire made with asbestos cement waste (IOM, 2007). The calculated average weekly airborne fibre concentrations resulting from pedestrian and vehicular use of these farm tracks were <0.00001 – 0.0007 f/ml. Vehicular traffic was described by the authors to be one to two vehicles per hour.
- 7.24. Overall, the Appellant will contend that respirable fibre release from weathered/damaged bound asbestos (ACMs) will be very low compared to the potential release from unbound, more friable asbestos containing materials that will not be accepted and treated at the DH Site and the MG Site. The very low release from bound asbestos is reflected in the air monitoring data and the post-processed soil data that has been reviewed from Maw Green and ERQ. The Appellant will

therefore demonstrate that the risk of any material level of emissions arising from the Proposed Activity at the DH Site and the MG Site is low.

Influence of soil moisture on asbestos fibre release from soil

- 7.25. The Appellant's expert evidence will provide a full overview of the relevance of soil moisture to the risk of fibre release from soils treated by the Proposed Activity. Soil moisture content is a key factor in asbestos fibre release from soil. Excavated soil received at the STF will be highly unlikely to have zero moisture content, and it will be stockpiled under sheeting before being processed, thus reducing the potential for stored soil to dry out prior to being processed. Laboratory moisture testing of post-processed soil at Maw Green and ERQ confirms this, with reported soil sample moisture contents typically above 10%. The testing dataset comprises 68 soil samples from Maw Green and 278 soil samples from ERQ. This data set will be relied upon as part of the Appellant's evidence.
- 7.26. Scientific studies published in the UK and in The Netherlands have established the significance of soil moisture on asbestos fibre release from soil. The laboratory studies reported by IOM (1988) indicate that a soil moisture content of 10% reduced measured airborne fibres by a factor of 10. Similar studies by TNO and reported by RIVM (2003) indicated that a soil moisture content of 5-10% reduced the re-suspension of asbestos fibres in air by a factor of 100.
- 7.27. The principal assumption made by the authors in the study of farm tracks in South Cambridgeshire (IOM, 2007) on the effects of weather on fibre release was that the airborne fibre concentration on wet days would be 'small, probably negligible' compared to that on dry days.
- 7.28. In HSG248 (Appendix 8) it is stated (A8.4) that if the soil surface is damp, almost no release of asbestos fibres to air will occur.
- 7.29. The Appellant will refer to and rely upon the evidence relating to soil moisture levels to demonstrate that the risk of asbestos fibre release is low and will further support its case with the results of monitoring data. Reference will also be made to the operational controls which will be available as part of the Proposed Activity at the DH Site and the MG Site to ensure that soils retain moisture levels and minimise the risk of asbestos fibre release.

Airborne fibre dispersion off-site

- 7.30. The Appellant's evidence will address and assess the risks of airborne asbestos fibre dispersion occurring off-site with respect to the relevant sensitive receptors at the DH Site and the MG Site.
- 7.31. Both primary and secondary emissions will be considered to ensure a robust approach is taken to the assessment processes.
- 7.32. AERMOD air dispersion modelling undertaken by Isopleth Ltd for a particulate emission source located at the DH Site and the MG Site indicates that air dispersion will likely reduce off-site 'at receptor' air concentrations by at least two orders of magnitude compared to near-source concentrations on-site. This is based on conservative modelling of dust with no wet deposition (i.e. assuming that the dust behaves as a gas), and without place a tree 'barrier' downwind. of the DH Site. The MG Site has no significant tree barriers that would significantly effect the modelling.
- 7.33. Off-site receptor sensitivity is a function of land-use and associated human exposure patterns, distance to the STF, and location orientation relative to the STF. The frequency and duration of exposure at the receptor location dictates the cumulative exposure when coupled to the expected air concentration. The distance and orientation to the STF dictates the receptor air concentration at any point in time as fugitive fibre emissions from the STF will only reach the receptor if the wind is blowing in the right direction, and the distance, coupled to the wind speed and other climatic conditions such as rainfall, will dictate the attenuation (reduction) in airborne fibre concentration from the emission source. This also applies for the MG Site.
- 7.34. The AERMOD modelling, using almost 6 years of meteorological data suggests that the closest off-site receptor is the Travellers' Site located to the south of the DH Site. This meteorological data indicates that the wind direction is predominantly away from the Traveller's Site as opposed to towards it.
- 7.35. The receptor locations for the DH Site are as follows:

		OS GR Xm	OS GR Ym	distance (m)
1	Travellers Site 1	467591.30	386492.80	169.34
2	Travellers Site 2	467698.80	386492.80	167.19
3	Daneshill Cottages	467050.00	386592.00	430.47
4	Loundfield Farm 1	468136.20	386659.70	470.64
5	Loundfield Farm 2	468230.00	386636.00	566.89
6	Tudorstone Building Materials	467725.30	386374.85	288.07

7	Tomlinson Family Settlement	467311.00	386327.00	393.91
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7.36. The receptor locations for the MG Site are:

		OS GR Xm	OS GR Ym	distance (m)
D1	Brook House Farm	372139.1	357327.8	289
D2	Brook House Barns	372174.0	357310.6	325
D3	Meadow Croft Cottage	371910.4	357125.4	205
D4	New Development (Maw green Road)	371852.8	357074.0	221
D5	New Development (Maw green Road)	371883.7	357102.6	208
D6	New Development (Maw green Road)	371936.4	357156.0	202
D7	New Development (Maw green Road)	371956.0	357183.9	193
D8	South of Maw Green Road	371642.8	357074.7	249
D9	South of Maw Green Road	371583.3	357074.0	286
D10	Windy Nook	371459.1	357112.4	363
D11	Shandon Barn	371359.0	357373.6	430

Risk Estimation

7.37. The SoBRA AiSHHRA Toolbox provides a structured way of assessing the potential health risk from exposure to fugitive airborne asbestos fibres resulting from the disturbance of asbestos in soil. The estimation of health risk can be calculated using the SoBRA Excel-based spreadsheet that was developed to support SoBRA's discussion paper on guidelines for airborne concentrations of asbestos in ambient air (SoBRA, 2021b). This calculation tool requires the exposure point air concentration, and the exposure frequency and duration for 5-year time periods. The health risk from asbestos exposure is related to the cumulative exposure dose (air concentration x duration) and the age of first exposure.

7.38. The Appellant will utilise these tools to model exposure utilising a precautionary approach and taking into account the planned operational timescale for the DH Site of 10 years. The 10 year operational life will be controlled by the planning regime. The MG Site has an operational life of MG landfill to 21 December 2027 with restoration required by 31 December 2028.

7.39. The near source activity-based sampling at Maw Green and ERQ has shown that the majority of reported airborne asbestos fibre concentration are less than the method LOQ (0.0005f/ml). Reported concentrations above the LOQ are infrequent and average concentrations are <0.0005f/ml. It is not reasonable to assume that off-site

concentrations will be at the LOQ (i.e. 0.0005f/ml). It is therefore reasonable to assume on a precautionary basis that exposure concentrations at the Travellers' Site should not exceed 0.000005f/ml (5f/m³), i.e. at least 100 times lower than the on-site monitoring LOQ, taking into account the balance of evidence on likely air dispersion. It is expected that actual off-site receptor concentrations will be much lower than this.

- 7.40. The Appellant will demonstrate that the estimated lifetime risk of mesothelioma and lung cancer from the above exposure scenario is insignificant.
- 7.41. The Appellant will therefore demonstrate that significant pollution will not arise from the Proposed Activity at the DH Site or the MG Site.

8. BAT

- 8.1. The Appellant's evidence will address in detail the interpretation, application and requirements of BAT demonstrating that the Proposed Activity at the DH Site and the MG Site is fully compliant with the same. In particular, the Appellant's expert evidence will address the following areas:

Legislative Framework

- 8.2. The legislative framework for environmental permitting is provided by European Union Directive 2010/75/EU on industrial emissions ("the **IED**") and the Environmental Permitting Regulations 2016 ("the **EPR**") (not EPR 2010 as the EA reference in the Decision Notice (the **DN**)).
- 8.3. Article 11 of the IED requires that all appropriate preventive measures are taken against pollution, best available techniques are applied and that no significant pollution is caused. If the installation complies with the IED then Article 5 requires the competent authority to grant a permit.
- 8.4. The EPR defines pollution as any emission resulting from human activity which may be harmful to human health or the quality of the environment, cause offence to a human sense, result in damage to material property, or impair or interfere with amenities or other legitimate uses of the environment. The EPR require the regulator to exercise its functions to achieve a high level of protection of the environment taken as a whole by, in particular, preventing, or where that is not practicable, reducing emissions into the air, water and land. The regulator must exercise its functions so as

to encourage the application of emerging best available techniques (BAT) as defined in Article 3 of the IED.

8.5. In addition to the application of BAT, Article 11 of the IED states that:

‘Member States shall take the necessary measures to provide that installations are operated in accordance with the following principles:

- (a) all the appropriate preventive measures are taken against pollution;*
- (b) the best available techniques are applied;*
- (c) no significant pollution is caused;*
- (d) the generation of waste is prevented in accordance with Directive 2008/98/EC [the Waste Framework Directive];*
- (e) where waste is generated, it is, in order of priority and in accordance with Directive 2008/98/EC, prepared for re-use, recycled, recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment;*
- (f) energy is used efficiently;*
- (g) the necessary measures are taken to prevent accidents and limit their consequences;*
- (h) the necessary measures are taken upon definitive cessation of activities to avoid any risk of pollution and return the site of operation to the satisfactory state defined in accordance with Article 22’.*

8.6. The proposed activity complies with each of these aspects of the IED which is implemented in England through the EPR.

8.7. The Waste (England and Wales) Regulations 2011 implements the Waste Framework Directive in England. Regulation 12 requires the implementation of the waste hierarchy and states that:

‘12. (1) An establishment or undertaking which imports, produces, collects, transports, recovers or disposes of waste, or which as a dealer or broker has control of waste must, on the transfer of waste, take all such measures available to it as are reasonable in the circumstances to apply the following waste hierarchy as a priority order—

- (a) prevention;*
- (b) preparing for re-use;*
- (c) recycling;*

(d) other recovery (for example energy recovery);

(e) disposal.

(2) But an establishment or undertaking may depart from the priority order in paragraph (1) so as to achieve the best overall environmental outcome where this is justified by life-cycle thinking on the overall impacts of the generation and management of the waste.

(3) When considering the overall impacts mentioned in paragraph (2), the following considerations must be taken into account—

(a) the general environmental protection principles of precaution and sustainability;

(b) technical feasibility and economic viability;

(c) protection of resources;

(d) the overall environmental, human health, economic and social impacts.'

8.8. The Proposed Activity at the DH Site and the MG Site complies with the waste hierarchy in that the treatment process achieves the recovery and reuse of soils contaminated with asbestos which otherwise would remain a hazardous waste for which the only management option is disposal to landfill. In addition, the oversized materials removed by the screening process comprising large stones, bricks and lumps of concrete are husbanded and used on site as hardcore to form the surface of haul roads and other infrastructure. It will be confirmed by the monitoring data presented in the Appellant's evidence that given the proposed control techniques and emissions monitoring which will be implemented as part of the proposed activity that there will be no overall adverse environmental or health impacts as a result of the proposed activity therefore the activity should be consented in order to achieve the benefits in accordance with the waste hierarchy.

8.9. The Hazardous Waste (England and Wales) Regulations 2005 includes a duty for the separation of hazardous wastes. Regulation 20 states that:

'20. (1) This regulation applies to the holder where—

(a) the hazardous waste has been mixed other than under and in accordance with a waste permit or a registered exemption, whether by the holder or a previous holder; and

(b) separation is both—

(i) technically and economically feasible; and

(ii) necessary in order to comply with the Waste Directive conditions.

(2) The holder must make arrangements for separation of the waste to be carried out in accordance with a waste permit or registered exemption as soon as reasonably practicable.

(3) In this Regulation “separation” means separation of a waste from any other waste, substance or material with which it has been mixed.’

- 8.10. The waste which would be received for treatment by the Proposed Activity at the DH Site and the MG Site typically comprises mixed construction and demolition waste which includes soils mixed with Asbestos Containing Materials (ACMs). Even if some segregation activity has been implemented at the site of arising of the waste, unseparated ACMs remain mixed with the soils meaning that the whole of the waste load is classified as hazardous waste unless and until the ACMs are removed and any residual free fibres in the soil remain below the hazardous waste threshold (<0.1% by weight of asbestos fibres in soil). The Proposed Activity achieves the separation of the mixed wastes in a manner which is demonstrably technically and economically feasible.

Description of the Proposed Activity

- 8.11. A detailed description of the Proposed Activity at the DH Site and the MG Site will be provided in the Appellant’s evidence. The summary will include each stage of the process including the pre-acceptance and acceptance checks, the screening and hand picking stages of the treatment process and the validation sampling and analysis of the treated outputs as well as the comprehensive, extensive monitoring of the emissions close to the Proposed Activity as well as at the site boundary (for both the DH Site and the MG Site). The Proposed Activity at the DH Site and the MG Site is for the separation of solid, bound asbestos containing materials from soils. Research and monitoring demonstrates that the potential for the release of asbestos fibres from soils and from bound materials is lower in quantitative terms and presents a lower risk to health for chrysotile asbestos compared with other types of asbestos fibres. The Proposed Activity at the DH Site and the MG Site is not designed to remove free fibres from soils and therefore there is a limit set on the concentrations of unbound asbestos fibres in the soils accepted at the facility. The limit for soils accepted at the facility is <0.1% of free chrysotile fibres and <0.01% of free amphibole fibres.
- 8.12. It is known that non- bound asbestos containing materials, such as insulation and lagging products have a greater potential to release asbestos fibres. Accordingly, only soils containing bound ACMs will be accepted for treatment at the proposed

facility and no soils containing insulation or lagging materials or any other forms of ACM which are not bound will be accepted for treatment in the Proposed Activity at the DH Site and the MG Site. The pre-acceptance and acceptance criteria for wastes to be received for treatment at the Proposed Activity at the DH Site and the MG Site will be set out in the pre-acceptance and acceptance criteria for the treatment facility. All of these acceptance criteria will minimise the potential for emissions of fibres from the treatment process.

8.13. As will be explained in the Appellant's evidence, incoming wastes which comply with the pre-acceptance and acceptance criteria will be received, inspected and sampled and then stored externally in covered (sheeted) stockpiles awaiting receipt of the results of confirmatory analytical checks. The reception and storage areas and all waste treatment areas will be located on an impermeable surface with an integrated drainage collection and retention system. Based on the comments of the EA in the Decision Documents which relate to the Appeals there is no indication that these acceptance, reception and storage stages of the Proposed Activity at the DH Site or the MG Site give rise to any concerns from the EA (except that the EA is seeking storage of ACMs to be contained within a building).

8.14. Following the confirmatory checks, the mixed soil and ACM waste will be transported to a 3-way mechanical screening facility. The screener will separate the waste into three outputs:

- Oversize comprising large pieces of stone, concrete and bricks approximately >50mm. There is a limited potential for any ACMs to be included in the oversize fraction but all outputs will be subject to visual checks in order to identify and remove by hand any large ACMs such as pieces of cement pipe. Once confirmed as not containing ACMs, the oversize materials will then be reused as general fill and a base for haul roads and other infrastructure on site.

- Soil fraction approximately <15mm. There is a limited potential for any ACMs to be included in the small size fraction but all outputs will be subject to visual checks in order to identify and remove by hand any small pieces of ACMs in this separated fraction. The soils will be subject to testing for asbestos fibre content to confirm the suitability of the material prior to reuse in the landfill restoration.

- Mid-size fraction which will be transferred to the picking station where ACMs are removed by hand picking. The ACMs which are removed will be deposited directly into robust bags for sealing and storage in an enclosed container prior to removal for

landfill disposal. The soils which have been subject to inspection and hand picking will be subject to testing for asbestos fibre content to confirm the suitability of the material prior to reuse in the landfill restoration.

- 8.15. The techniques implemented to minimise the potential for the emissions of fibres and particulates together with the associated monitoring and data review and response procedures will be explained in the Appellant's evidence. The EA consider that the use of a mechanical screening process has the potential to create additional free fibres as a result of the mechanical agitation inherent in the process. It will be explained in the Appellant's expert evidence that there is no evidence of the use of a mechanical screening process such as that proposed resulting in the generation and release of additional asbestos fibres in any material quantities. The use of the screening stage improves the efficiency of the separation process by allowing the hand picking stage to be focussed on the fraction of the waste which contains the ACMs and significantly reduces the treatment time and energy use for the treatment method.
- 8.16. The application of the segregation process will allow the reuse of the oversize fraction for use as hardcore on site and the use of the soils in the restoration of the site as part of a consented recovery activity. The quality of the soils which are reused for landfill restoration will be tested to confirm that they comply with quality criteria set out in a restoration specification which will be agreed with the Environment Agency. The restoration specification has not yet been agreed for the restoration of the DH Site, but an approved risk assessment methodology and soil specifications have been agreed with the EA for the restoration of the MG Site and other landfill sites with recovered waste, including limits for asbestos fibres, and the same approach will be implemented for the DH Site. The EA has not indicated that the proposals for the reuse of the treated soils in the restoration of the landfills at either the DH Site or MG Site give rise to any concerns, subject to the agreement of a restoration specification.

Relevant techniques under BAT

- 8.17. As summarised above, the IED establishes a general framework for the control of the main industrial activities which have the potential to generate pollution. The IED recognises (Recital (3)) that different approaches to controlling emissions into air, water or soil separately may encourage the shifting of pollution from one environmental medium to another rather than protecting the environment as a whole. It therefore seeks to provide an integrated approach to the prevention and control of

emissions into air, water and soil, to waste management, to energy efficiency and to accident prevention.

- 8.18. The industrial activities to which the IED applies which are relevant to the Appeals are set out in the Scope in Article 10 which refers in turn to the Activities set out in Annex I to the IED and which, in England and Wales, are reproduced in Schedule 1 to the EPR2016. Schedule 1, Part 2, Chapter 5 of the EPR 2016 relates to waste management activities and section 5.3 relates to the disposal or recovery of hazardous waste at a facility with a capacity of more than 10 tonnes per day, which includes the proposed soil and asbestos segregation activity.
- 8.19. Best Available Techniques reference documents (BREFs) are a series of reference documents covering, as far as is practicable, the industrial activities listed in Annex I to the IED. They provide descriptions of a range of industrial processes and for example, their respective operating conditions and emission rates. European Member States are required to take these documents into account when determining best available techniques which should apply to operations which are regulated under the IED.
- 8.20. In accordance with Article 13 of the IED BREFs are developed and regularly reviewed and updated through a formalised process which is overseen by the European IPPC Bureau. The development and review of BREFs is carried out by a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection. The BREFs set out the 'Best Available' techniques and standards in the industry across Europe as summarised in Regulation 13(2) of the IED:

'2. The exchange of information shall, in particular, address the following:

(a) the performance of installations and techniques in terms of emissions, expressed as short- and long-term averages, where appropriate, and the associated reference conditions, consumption and nature of raw materials, water consumption, use of energy and generation of waste;

(b) the techniques used, associated monitoring, cross-media effects, economic and technical viability and developments therein;

(c) best available techniques and emerging techniques identified after considering the issues mentioned in points (a) and (b).'

- 8.21. The BAT Conclusions (BATc) that are derived through this process must be implemented in all IED industrial facilities throughout Europe covered by each relevant BREF within a specified timescale. In this way the IED and BREF process seeks to achieve a 'level playing field' in terms of the operating techniques and emissions providing consistent environmental protection standards within industries carrying out the activities covered by the IED throughout Europe. The current Waste Treatment BREF (WT BREF) and BATc (WT BATc) documents were published in 2018.
- 8.22. The current BREF and BATc documents as well as the IED comprise European legislation and guidance. Following the departure of the UK from the EU, the UK Government has started working on the development of a future regime for the development of BAT within the UK and a consultation took place on these proposals in 2021⁵. A new UK BAT regime is beginning to be implemented with four industry sectors identified as the first to undergo this review process. These sectors do not include the waste management sector. For all other industry sectors, including the waste management sector, existing EU BATc continue to have effect in the UK through the EU Withdrawal Act 2018⁶.
- 8.23. Neither the WT BREF nor the WT BATc refer specifically to the treatment of soils or other wastes contaminated with asbestos. Asbestos in the form of '*suspended particles, fibres*' is identified as a '*polluting substance*' in the list at Annex II of the IED.
- 8.24. Techniques for the treatment of excavated contaminated soil are discussed in Section 5.6 of the WT BREF. The treatment techniques discussed depend, of course, on the nature of the contaminants present in the soil and include thermal desorption, soil washing (which includes reference to the use of screening to remove debris), vapour extraction, solvent extraction and biodegradation. There is no discussion of the removal of asbestos from soil by the use of screening and/or hand picking. The treatment of waste asbestos is discussed in section 5.8.4 of the WT BREF but this is in reference to the shredding and mixing of material prior to thermal treatment. No specific emission control measures are referenced for these shredding and mixing processes.
- 8.25. Similarly, there are no techniques described in the WT BATc for the removal of asbestos from soil by the use of screening and/or hand picking. The general BAT for

⁵ https://consult.defra.gov.uk/airquality/industrial_emissions_bat/

⁶ <https://www.gov.uk/government/publications/establishing-the-best-available-techniques-for-the-uk-uk-bat/establishing-the-best-available-techniques-for-the-uk-uk-bat>

the prevention or minimisation of emissions of polluting substances to air must therefore be reviewed to determine the techniques which comprise BAT for the proposed activity. In addition to the specific techniques for the controls of emissions to air which are discussed further below, there are a number of general BAT techniques which relate to management systems and procedures, staff competence and training, management plans for accidents, odour and noise, and a number of other overarching systems and procedures including surface water management and monitoring of discharges to water. The application of these wider BATc measures are identified in detail in the table on pages 20 to 39 of the Treatment Process Description and Indicative BAT review July 2021 (Appeal Document 10, pdf pages 285 to 304) which formed part of the permit application documentation. There have been no adverse comments or concerns raised with regard to the generic BAT techniques in the DN, and these techniques relate also to the other soil treatment activities which have been consented in the variation issued to DH EP1 in December 2022. Therefore it is assumed that the EA accept that these aspects of BAT are appropriate and acceptable.

- 8.26. The BATc which relate to the controls on emissions of asbestos fibres to air are BAT 8 (monitoring channelled emissions to air), BAT 14 (reduce diffuse emissions to air), BAT 25 (mechanical treatment of waste) to reduce emissions to air of dust, BAT41 (physico-chemical treatment of solid and/or pasty waste) emissions to air. Each of these techniques will be implemented as part of the Proposed Activity. All of the techniques that will be implemented at the different stages of the Proposed Activity comprise BAT and their collective implementation will prevent or minimise the emissions of asbestos fibres and result in the generation of a treated soil and hardcore both of which can be recovered and reused rather than disposed of in a landfill site as hazardous waste. It will be demonstrated in the Appellant's expert evidence that the equipment proposed is the best available and that mechanical screening equipment with additional enclosure is not 'available'. The Proposed Activity for the DH Site and MG Site will include a comprehensive regime of monitoring (which is in excess of the BAT requirements) in order to provide robust evidence that the management and control techniques being implemented are and continue to be effective.
- 8.27. The main EA guidance document for the operation of Installations is set out in '*Chemical waste: appropriate measures*'⁷ which comprises EA guidance for regulated facilities with an environmental permit to treat or transfer chemical waste and includes

⁷ <https://www.gov.uk/guidance/chemical-waste-appropriate-measures-for-permitted-facilities>

activities for the treatment of contaminated soil. This guidance reflects the WT BATc requirements and therefore sets out similar control measures to those described in the WT BATc. As for the WT BREF and the WT BATc, there is no specific guidance for treatment processes comprising the segregation of ACMs from contaminated soil.

- 8.28. The EA do not refer to the appropriate measures guidance in the Decision Document for Appeal One , but they make reference to guidance document S5.06. In the consultation on the appropriate measures guidance prior to its implementation it is stated that:

‘Currently, relevant measures and standards for permitted facilities that take chemical waste for treatment or transfer are set out in published technical guidance note EPR 5.06 Guidance for the recovery and disposal of hazardous and non-hazardous waste (May 2013). The proposed guidance, which is being consulted on, will replace this guidance note and will be available as web guidance on the gov.uk website.’⁸

- 8.29. Guidance document S5.06 is no longer in force; it has been replaced the Chemical Waste: Appropriate Measures document. We note that the Decision Documents relating to Appeal Two and Three, correctly, do not refer to Guidance document S5.06.

- 8.30. The prevention or minimisation of the emissions of asbestos fibres also is a requirement of the Control of Asbestos Regulations 2012 (CAR 2012). Regulation 11 (1) of CAR 2012 states that:

‘11. (1) Every employer must—

(a) prevent the exposure to asbestos of any employee employed by that employer so far as is reasonably practicable;

(b) where it is not reasonably practicable to prevent such exposure—

(i) take the measures necessary to reduce exposure to asbestos of any such employee to the lowest level reasonably practicable by measures other than the use of respiratory protective equipment,’

- 8.31. Regulation 16 of CAR 2012 states that:

⁸ <https://consult.environment-agency.gov.uk/environment-and-business/appropriate-measures-for-chemical-waste/>

'16. Every employer must prevent or, where this is not reasonably practicable, reduce to the lowest level reasonably practicable the spread of asbestos from any place where work under the employer's control is carried out.'

- 8.32. The prevention and minimisation of emissions of asbestos fibres therefore are regulated both by the EA through the EPR and by the Health and Safety Executive (HSE) through CAR 2012. The HSE was a consultee during the application for the variation to the Environmental Permit.
- 8.33. The UKHSA responded in the decision document for EPR/NP3538MF. The Appellant requests disclosure of the full consultation response from the UKHSA to the EA.

The need for and the benefits of the recovery of soil

- 8.34. The objective of the Proposed Activity at the DH Site and the MG Site is to treat soil contaminated with ACMs in order that the soil can be recovered for use rather than disposal. If the ACMs present in the soil are not removed, the soil will remain classified as a hazardous waste and the only disposal route is in a hazardous waste landfill site. The soils which will be treated at the proposed facility generally will contain only a limited proportion of ACMs by weight and therefore the presence of the ACMs directly limits the potential for the use of the substantial majority of the overall weight of the waste (i.e. the soil component) unless the ACMs are removed. It is self-evident that there are considerable environmental benefits to achieving the removal of the ACMs and the reuse of the soil rather than its disposal which would utilise valuable hazardous waste landfill void. Data for the effectiveness of the ACM screening activities at the other FCC sites operated by Provectus show that the screening and hand picking results in the recovery of more than 99% of the soil which has been treated. Without the ACM removal process, all of the soil and the minimal quantities of ACMs contained within it would have to be disposed of to landfill as hazardous waste.
- 8.35. Furthermore, as explained above, there is an obligation to separate mixed hazardous wastes which would include mixed ACMs and soils in the Hazardous Waste (England and Wales) Regulations 2005 and an obligation to apply the waste hierarchy, which has disposal as the least preferred management method, in the Waste (England and Wales) Regulations 2011.

- 8.36. If the Proposed Activity at the DH Site and the MG Site is not consented, hazardous waste landfill void will be used for the disposal of the soil waste contaminated with a small amount of ACMs. This will not meet the obligation to separate hazardous wastes or the obligation to implement the waste hierarchy. There are very few other facilities which provide this treatment option for waste soils contaminated with ACMs.
- 8.37. The protection of soil resources is a fundamental aspect of a number of the Government environmental policies and strategies. The Environmental Improvement Plan 2023⁹ (“EIP 2023”) is the current review of the progress towards the achievement of the Government’s 25 Year Environment Plan. The prevention of valuable soil resources from being sent to landfill is identified as an objective within Goal 6 of the EIP 2023 ‘*Using resources from nature sustainably*’ in Section 4 which is ‘*Improving and protecting soil health*’ and it is stated in the EIP 2023¹⁰ that:
- ‘In 2016, soil made up 58% of material sent to landfill in the UK. In construction projects, the careful re-use of soil can avoid soil being designated a waste material and to bring it back to beneficial use, helping create more green spaces and increasing biodiversity. We are working to:*
- In 2023, publish a revised Code of Practice for the sustainable use of soil on construction sites, which will help to reduce the amount of soil sent to landfill.*
 - Begin development of a Soil Re-Use and Storage Depot scheme to help prevent soil that would otherwise be classified as waste going to landfill, and encourage remediation and re-use of soil. We will start piloting this by 2026.’*
- 8.38. The treatment of soil for its beneficial use rather than disposal to landfill is therefore a key part of the Environmental Improvement Plan and the proposed facilities provide a direct contribution to that objective.
- 8.39. The importance of soils to the environment is emphasised in the DEFRA document ‘Safeguarding our Soils. A Strategy for England’¹¹ (“the Soil Strategy”) and is reiterated in the 2023 update ‘State of the Environment Soil Report’¹² . Chapter 7 of

⁹ <https://www.gov.uk/government/publications/environmental-improvement-plan>

¹⁰ page 181

¹¹

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69261/pb13297-soil-strategy-090910.pdf

¹²

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/805926/State_of_the_environment_soil_report.pdf

the Soil Strategy relates to 'Dealing with our legacy of contaminated land' and includes objectives for less reliance on 'dig and dump' techniques that involve disposing of large amounts of contaminated soils in landfill sites.

- 8.40. It is clear that in the above policies, objectives and strategies that treatment techniques (such as those proposed at Daneshill and Maw Green) for the removal of contaminants from soil in order to remediate the soil for recovery and reuse are fully supported and that the Proposed Activity at the DH Site and the MG Site will contribute directly to achieving an overall environmental benefit for the natural environment.

9. PERMIT VARIATIONS – APPEALS TWO AND THREE

- 9.1. The Appellant appeals the following conditions of DH EPi2 n so far as they relate to ACM related activities at the STF at the DH Site:

9.1.1. 3.1.6, 3.5.1, Table S1.1 (AR3A and AR4), Table S1.3 (IC12), Table S1.4 (PO7), Table S3.2, Table S4.1, Table S4.4; Table S2.8, Table S3, 11A.

- 9.2. The Appellant appeals the following conditions of the MG EP in so far as they relate to ACM related activities at the STF:

9.2.1 Condition 2.1.1; 2.3.1; 2.4.1; 2.5.1; 3.1.2; 3.1.3; 3.5.1 (b), (g); Table S1.1, AR6, in respect of conditions imposed on ACM related activities; Table S1.1, AR7, Table S1.2, Row 27 relating to the exclusion of all references to mechanical screener not being enclosed; Table S1.3, Reference 5; Table S1.4, Reference 4; Table S2.4; Table S3.2, Row 2, regarding point source emission for asbestos screener; Table S3.14¹³

- 9.3. The Appellant's case for challenging the imposition of the conditions specified above is substantively the same as set out in Sections 6, 7 and 8 above. However, for completeness, the Appellant has summarised its full case in respect of Appeal One and Two below.

9.3.1. In response to specific requirements which the EA seeks to impose via permit conditions, the Appellant will contend that:

¹³ The reference in Table S3.14 to Pre-Operational condition 7, appears to be a typographical error cross referring to the Pre-Operational conditions in the DHEP.

9.3.2. the EA's requirement for all ACM related storage and activity at the DH Site and the MG Site to be located within a building:

is unjustified and not supported by a risk-based approach, having regard to the best available evidence;

9.3.2.1. would result in an outcome which would be contrary to the achievement of the waste hierarchy;

9.3.2.2. does not constitute BAT;

9.3.2.3. will result in worse overall environmental outcomes and therefore is in conflict with the IED;

9.3.2.4. will render the Appellant unable to undertake the proposed ACM related activities, resulting in additional hazardous waste being sent to landfill.

9.3.3. In addition, the EA's requirement that the proposed mechanical screener be 'fully enclosed' (the Appellant understands that enclosure of the screener within a building would be insufficient to fulfil the EA's requirement) with all emissions being captured and directed to a HEPA filter:

9.3.3.1. does not represent BAT:

9.3.3.2. it is entirely impracticable; there are no 'fully enclosed' screeners available on the market; fully enclosing a screener is not 'available' and therefore cannot constitute BAT. The EA's assertion in the DD that HEPA filters are 'commonly available' and 'used at other sites' is disputed with specific reference to the screener

9.3.3.3. even if it were possible, the additional costs associated with the screener being 'fully enclosed' would be outweighed by the limited benefits which could, theoretically, be obtained by 'full enclosure'; and

9.3.3.4. will result in worse overall environmental outcomes by effectively precluding the Appellant's ability to treat ACMs using the screener and would therefore be in conflict with the IED.

Ground One – the Proposed Activity complies with the requirements of BAT

9.4. The Appellant will demonstrate that the Proposed Activity at the DH Site and the MG Site is fully compliant with BAT.

- 9.5. As set out in detail at the application stage, the Proposed Activity at the DH Site and the MG Site will be operated in accordance with stringent management and operational procedures to ensure that emissions are prevented or minimised, where possible, using appropriate techniques. The Proposed Activity and activity at the MG Site will be operated in the same manner.
- 9.6. The Proposed Activity at the DH Site and the MG Site will be undertaken in accordance with industry best practice. Provectus is an industry leader in the field of the treatment and remediation of asbestos contaminated soils and operates facilities to strict internal controls so as to avoid, where at all possible, any asbestos related emissions.
- 9.7. The EA's position fails to recognise that the Proposed Activity at the DH Site and the MG Site will not be receiving homogenous waste streams and fails to adopt an appropriate, risk based approach based on the best available evidence. The EA's position is incoherent and internally contradictory. It seeks to impose an unachievable requirement that the screening component Proposed Activity at the DH Site and the MG Site must not result in the generation of 'additional' asbestos fibres. This fails to have any regard to the key issue of whether the Proposed Activity at the DH Site and the MG Site would result in a material risk to the environment or human health. It further fails to have any regard to the fact that the EA permits the handpicking of asbestos fragments at this and other installations notwithstanding the EA's accepted, "...risk of fibre release from handpicking...".¹⁴
- 9.8. The EA has failed to provide any evidence (technical or otherwise) to support its assertions in any of its Decision Documents that the Proposed Activity at the DH Site and the MG Site will result in any material increase in the amounts of asbestos fibres which may be released, or indeed to support any of the assertions made by the EA in its Decision Documents.
- 9.9. The Appellant will demonstrate, via the analysis of robust monitoring data, that the Proposed Activity at the DH Site and the MG Site will not result in any material increase in the amounts of asbestos fibres which may be released so as to pose a material risk to the environment or human health.
- 9.10. The Appellant will adduce expert evidence in support of its Appeal to fully assess all potential emission sources which arise from the Proposed Activity at the DH Site and

¹⁴ See paragraph 28 of the EA's Rule 6 Statement for the Extant Appeal, dated 24 July 2023.

the MG Site and demonstrate that BAT will be complied with throughout the 'life cycle' of the operation.

- 9.11. The EA has not published any guidance which addresses the requirements of BAT specifically in the context of the remediation of asbestos contaminated soils.
- 9.12. The Decision Documents for DH EP2 and the MG EP do not disclose any technical basis on which the EA relies to assert that, in this context, BAT requires all ACM related activities at the STF to be located within a building and/or that the mechanical screener must be 'fully enclosed'. The EA's position is characterised by assertions which are unsupported by evidence, technical or otherwise. The Appellant's expert evidence will demonstrate that the Proposed Activity at the DH Site and the MG Site complies with BAT.
- 9.13. Reference is made by the EA in the Decision Documents to the use of 'full enclosure' and HEPA filters at other facilities, without providing any details or evidence to support this. The Appellant is not aware of any other facility which operates using a 'fully enclosed' screener.
- 9.14. The EA has now, by way of a regulator-initiated variation dated 5 October 2023, partially revoked the Maw Green Permit (the MGEP). In summary, the revocations mean that ACM related activities, which were in July 2023 deemed acceptable by the EA 'as applied for' and which were to be undertaken outdoors, will now be required to be subject to further limitations and conditions which, in essence, require the relevant activities to be 'enclosed'. As a result, treatment activities at MG Site have ceased pending the outcome of this Appeal.
- 9.15. As referenced in paragraph 6.13 of the Appellant's Grounds of Appeal, it now could not be clearer that the EA has adopted an erroneous and unjustified interpretation to BAT14 which requires all ACM related activities proposed by the Appellant to be undertaken inside a building and additionally requiring the proposed screener and handpicking line to be "fully enclosed". It is important to note that the Appellant expects the EA to contend that the enclosure of the screener and/or handpicking line within a building would be insufficient to comply with the requirement for these activities to be 'enclosed' as per the wording of the MGEP.
- 9.16. The EA imposed similar conditions requiring 'full enclosure' of a mechanical screener for ACM related activities at the Appellant's landfill site at Edwin Richard's Quarry ("ERQ"). The Appellant has made repeated applications to comply with the condition imposed at ERQ and demonstrated that it is not possible for this condition (as

interpreted by the EA) to be complied with. The Appellant will refer to and rely upon the efforts made to discharge this condition at ERQ as part of its evidence to this appeal, including the EA's recent refusal to agree a local enforcement position which would have provided the Environment Agency with further monitoring data (tested by a UKAS accredited third party laboratory) from the operation of the mechanical screener on asbestos emissions at ERQ to provide additional reassurance regarding the negligible level of risk.

- 9.17. The Appellant will contend that the EA has failed to have proper regard to the need to prevent or reduce to a minimum the overall impact of any emissions on the environment and the risks to it. The EA's decision conflicts with the objectives of ensuring that waste is managed in accordance with the waste hierarchy and the duty imposed by the Hazardous Waste (England and Wales) Regulations 2005, which requires the Appellant to separate hazardous waste where technically and economically feasible.
- 9.18. The Appellant reserves the right to respond to any new technical or expert evidence which the EA seeks to submit through the Appeal process.

Ground Two – EA has mis-interpreted (a) BAT14 and (b) BAT14(d)

(a) BAT14

- 9.19. The EA has adopted an erroneous interpretation of BAT14 which places undue reliance on selective parts of BAT14d.
- 9.20. The EA considers that any mechanical screening of ACMs at the DH Site and the MG Site must be 'fully enclosed' with all asbestos emissions arising from the mechanical screener being "treated via an abatement system prior to release".
- 9.21. It should be noted that the EA has not adopted any guidance nor adduced any evidence which supports its assertions that: i) all ACM related activities must be located 'within a building' to be compliant with BAT; ii) that the screener must be 'fully enclosed' in order for the Proposed Activity to be compliant with BAT; iii) that the ELV for ambient emissions of asbestos fibres should be 0.01 f/ml (as opposed to 0.1 f/ml). Neither has the EA carried out any assessment which considers the practicability of any such policy approach being imposed on industry, having regard to the wider objectives of the IED and the need to ensure waste is managed in accordance with the waste hierarchy. No evidence has been provided by the EA to support its assertion

in the DD that its decision to refuse the ACM treatment process in DH EP1, to issue the DHEP2 complies with the growth duty imposed by Section 108(1) of the Deregulation Act 2015 and the guidance issued in accordance with Section 100 of the Deregulation Act. The Appellant will demonstrate that the EA's decision will unduly constrain its ability to provide much needed treatment for ACMs and obstruct the restoration of the Daneshill Landfill and Maw Green Landfill. The EA has failed to provide any evidence that its decision to refuse the ACM treatment process in the DH EP1, to issue the DHEP2 and the MGEP subject to conditions for ACM related activities is consistent with other relevant decisions taken by it. The Appellant reserves the right to respond to any evidence and/or submissions made by the EA in respect of these matters.

- 9.22. It is not technically feasible for the mechanical screener to be 'fully enclosed' so that any emissions arising from it can be collected and directed to a HEPA filter. The Appellant has been unable to locate any 'fully enclosed' mechanical screener which is available on the market. The operation of mechanical screeners (which are used regularly in a wide variety of waste related treatment processes) is adversely affected by attempts to achieve 'full enclosure' via retrofitting the equipment. The Appellant has sought, through its attempts to discharge a similarly worded condition for the permit at its ERQ site, to comply with the EA's requirements but has been unable to find any technical solution which is capable of 'retro-fitting' a mechanical screener so as to ensure it is 'fully enclosed' as required by the EA. The Appellant will rely on this evidence in the appeal. The Appellant will contend that it would be impossible for it to comply with pre-operational condition PO7 of the DHEP2 or the similar pre-operational condition for MGEP.
- 9.23. Furthermore, the EA has now made explicit¹⁵ its requirement for all ACM related activities at the DH Site and the MG Site to be located within a building. However, its position in this respect is internally inconsistent. Firstly, the DD accepts that the Appellant's proposed Handpicking Station is compliant with BAT as applied for (it was not proposed to be located in a building). Furthermore, the construction of temporary buildings would result in greater environmental impacts as a whole, and would effectively preclude the STF from being able to operate. Secondly, there is no requirement, in the DHEP2, for any emissions which arise within the building itself (which the EA says must be provided to minimise the risks of asbestos fibre release) to be collected and directed to an abatement system.

¹⁵ This was anticipated by the Appellant in its Grounds of Appeal for the Extant Appeal; see paragraph 6.13 of the Grounds of Appeal for the Extant Appeal.

- 9.24. The Appellant will contend that, in order to comply with BAT, it is not necessary for the Proposed Activity at the DH Site and the MG Site to be ‘fully enclosed’ and/or located within a building and such an interpretation would: i) fail to ensure waste is managed in accordance with the waste hierarchy and ii) conflict with the Appellant’s duties to ensure hazardous waste is separated where technically and economically feasible.
- 9.25. As a starting point, the Appellant will contend that it is important to carefully consider the wording of BAT14. It states: “In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust...BAT is to use an appropriate combination of the techniques given below”.
- 9.26. 8 separate techniques (a. to h.) are then set out within the BAT Conclusion as forming part of BAT14.
- 9.27. As a matter of literal interpretation, it is self-evident that BAT14 does not require all of the techniques referred to in a. to h. to be deployed in order to establish compliance with BAT14. The key question to be determined is whether the proposal will use “an appropriate combination” of the techniques available.
- 9.28. Determining whether a particular combination of techniques is “appropriate” must be carried out in the context of the overall objective which BAT14 is seeking to achieve, namely the prevention or “where that is not practicable” the reduction of diffuse emissions to air.
- 9.29. The Appellant’s expert evidence will demonstrate that the Proposed Activity at the DH Site and the MG Site proposes to use a range of appropriate techniques which are specifically referenced within BAT14 including, for example¹⁶:
- 9.29.1. BAT14a – the Application proposes limiting the drop height of asbestos contaminated soils at all stages from initial acceptance onwards (as set out in the BAT14 Document);

¹⁶ N.B. BAT14 b, c and h are not relevant to the Appeal.

- 9.29.2. BAT14d – the Application proposes a number of containment measures will in fact be used including the sheeting of waste awaiting treatment, and the containment of the picking station;¹⁷
- 9.29.3. BAT14e – the Application proposes that the waste will be dampened with water including a proprietary surfactant throughout all stages of the waste being handled at the Site.
- 9.30. The Appellant’s evidence will demonstrate that a combination of techniques specified in BAT14 are in fact proposed for use, that they are ‘appropriate’ and that no other ‘available techniques’ are reasonably available. The Appellant’s evidence will assess the requirements of BAT14 and demonstrate that the Proposed Activity at the DH Site and the MG Site is compliant with the same.
- 9.31. The Appellant will contend that the EA has failed entirely to explain (and support any such explanation with objective technical evidence) why it considers that the combination of measures proposed by the Appellant is not ‘appropriate’, within the meaning of BAT14.
- 9.32. The Appellant will demonstrate that it has investigated the availability of equipment specifically designed for the treatment of ACMs. The Appellant will demonstrate that the EA has approved for use, in comparable circumstances, identical equipment as that which will be used by the Proposed Activity at the DH Site and the MG Site; reference will be made to case studies (including but not limited to those within the NICOLE Report) in support of the Appeal.
- 9.33. The Appellant will contend that the conditions imposed by the EA on the Proposed Activity at the DH Site and the MG Site are unjustified and unreasonable. The EA has failed to provide any specification as to why it considers the combination of techniques falling within BAT14 are not ‘appropriate’ having regard to the relevant facts. The EA has failed to take relevant technical information into account (which was offered to the EA during the application process). The EA’s FOI response to the determination of DH EP1¹⁸ confirms that the EA did not have the benefit of advice from any technical specialist, either within the EA or from external consultants, before the decision to refuse permission for the Proposed Activity was made. The Appellant will require the

¹⁷ It should be noted that the Application did not offer air extraction/filtration for the Handpicking Station. As per the DD for the DH EP2, the EA now accepts that air extraction/filtration for the Handpicking Station is not a requirement of BAT.

¹⁸ Letter dated 26/07/23 from Ms Rose Archibald at the EA to Ms Burton of the Appellant, under cover of email dated 26/07/23

EA to disclose, through the course of this appeal, the details of all technical specialists who provided expert assessment prior to the decision to issue the DHEP2 and details of the substantive technical assessment which was undertaken. The Appellant reserves the right to respond to further submissions and/or evidence which the EA submits during the course of the appeal.

(b) BAT14d

- 9.34. BAT14 states that, “**Depending on the risk posed by the waste** in terms of diffuse emissions to air, *BAT14d is especially relevant*” (emphasis added). The level of risk which triggers the ‘especial relevance’ of BAT14d is not prescribed in BAT14. The Appellant will contend that the EA has failed to properly understand and apply this aspect of BAT14 and BAT14d, in the context of the risks posed by the ACMs which will be recovered by the Proposed Activity and the MG Proposed Activity.
- 9.35. BAT14d relates to the ‘containment, collection and treatment of diffuse emissions’ and “includes techniques such as: - storing, treating and handling waste and material that may generate diffuse emissions in enclosed buildings and/or enclosed equipment (e.g. conveyor belts); - maintaining the enclosed equipment or buildings under adequate pressure; -collecting and directing the emissions to an appropriate abatement system...” (emphasis added).
- 9.36. Even where BAT14d is ‘especially relevant’, it does not require that all of the techniques described must be utilised in every case. The language makes clear that the techniques which are listed as forming part of BAT14d are ‘indicative’ in nature, it is not a closed list and the application of any, or indeed all, of the techniques is not prescribed in every case.
- 9.37. BAT14 directs both operators and regulators to carefully consider the relevance of BAT14d, in certain circumstances and does not prescribe the application of BAT14d in every case. To take such an approach would be to divorce the application of BAT from a proper understanding of the facts relating to a specific proposal, in direct contradiction to its meaning and purpose.
- 9.38. The ‘especial relevance’ of BAT14d is directly linked to the risk posed by the waste which is being assessed. This is an issue which must therefore be determined on the facts and applied on a ‘case by case’ basis, with particular regard to the characteristics of the specific waste stream which is being assessed.

- 9.39. The wording of BAT14d explicitly provides for 'containment' of diffuse emissions. Accordingly, the BAT Conclusion plainly envisages 'partial' enclosure of certain parts of equipment and processes as being compliant with BAT14d.
- 9.40. It is therefore erroneous to interpret BAT14d as requiring all ACM related activities to be located within a building in every case. Such a conclusion is not supported by the wording of BAT14d itself.
- 9.41. As mentioned above, there is an inextricable link between the relevance of BAT14d, and the need of any specific proposals to comply with its terms, and the level of risk to the environment and/or human health posed by the particular waste stream under consideration. The greater the risk, the higher the level of containment will likely be required to comply with BAT14d. Conversely, the lower the risk, the less likely that containment will be required in order to ensure compliance with BAT14d.
- 9.42. The Decision Documents do not provide any evidence which indicates that the EA has assessed or determined the degree of risk posed by the waste stream which the Application specifically proposes to store and handle. A zero-tolerance approach to the processing of asbestos related wastes is specifically cautioned against in the NICOLE Report and is not justified by reference to either BAT14d or Article 11 of the IED.
- 9.43. The Appellant will adduce monitoring evidence of asbestos emissions in support of its appeal. It should be noted that the Appellant offered to provide this evidence to the EA during the determination of the Application. The EA declined to accept receipt of or take into account the extensive data available from monitoring undertaken in respect of ACM treatment activities at the Appellant's Maw Green and/or ERQ site (undertaken in accordance with mobile permits). The Appellant will rely on the monitoring data available in respect of both Maw Green and ERQ to demonstrate that the risks arising from the Proposed Activity at the DH Site and the MG Site are negligible.
- 9.44. The Appellant will contend that the EA has incorrectly interpreted and applied BAT14d. Construed properly, the Appellant will demonstrate that the Proposed Activity at the DH Site and the MG Site is compliant with BAT14d and this will be dealt with in full by the Appellant's expert evidence on BAT (which will be submitted as part of this appeal).

9.45. Furthermore, the Appellant will contend that in reaching its decision refuse DH EP1 and to issue the DHEP2 and the MGEP, the EA failed entirely to undertake any, or any proper, assessment of the risk posed by the relevant waste stream in this case. This is a fundamental pre-requisite of BAT14. The Appellant will contend that the EA's failure in this regard has led to the unjustified decision to issue the Decision Documents.

Ground 3 – the Proposed Activity complies with Article 11 of the IED

9.46. As set out above, the Appellant will demonstrate that the Proposed Activity at the DH Site and the MG Site, as originally applied for, fully complies with BAT and that the EA's decision to impose conditions on the Decision Documents is predicated on an erroneous and unjustified interpretation of BAT.

9.47. The Appellant will adduce expert evidence to demonstrate that Article 11 of the IED is fully complied with by the Proposed Activity at the DH Site and the MG Site as:

9.47.1. All appropriate preventative measures are taken against pollution;

9.47.2. No significant pollution will be caused;

9.47.3. In accordance with Directive 2008/98/EC¹⁹, the asbestos contaminated soils will be recovered for re-use;

9.47.4. Necessary measures are taken to prevent accidents and limit their consequences.

9.48. The Appellant will adduce technical data to demonstrate, by way of expert evidence, that the Proposed Activity at the DH Site and the MG Site will not result in significant pollution.

9.49. The Appellant's expert evidence will address and explain the definition of hazardous waste in the context of ACMs and will provide quantitative data to demonstrate the magnitude and/or quantum of bonded asbestos which is expected to be processed by Provectus at the STF, based on the operation of existing facilities (operated in accordance with mobile permits).

9.50. The Appellant will emphasise the EA's failure to have regard to the results of monitoring (undertaken at other sites operated by Provectus) during the application process and that this failure to engage with technical information underpins (at least

¹⁹ As amended

in part) the erroneous conclusion of the EA that the Proposed Activity at the DH Site and the MG Site will result in significant pollution. The Appellant will rely upon monitoring data obtained at other sites operated by Provectus in support of its case.

- 9.51. The Appellant's expert evidence in support of the Appeal will provide a full review of the location of all relevant sensitive receptors and their location to the STF and to the DH Site and the MG Site. The Appellant's expert evidence will demonstrate that the Proposed Activity at the DH Site and the MG Site results in a negligible risk, assessed over its full life cycle, to the environment and human health, as a result of the effective deployment of BAT and compliance with the requirements of the Asbestos Regulations. Rigorous and extensive monitoring data will be adduced in support of the Appellant's case to demonstrate that the Proposed Activity at the DH Site and the MG Site will not result in significant pollution.
- 9.52. The Appellant will contend that the dispersion of emissions would further lower the potential risks of exposure (which are negligible in any event) even in the highly unlikely event of a release of asbestos fibres from the Proposed Activity at the DH Site and the MG Site.
- 9.53. The Appellant will contend that the EA has failed to have proper regard to the controls which are in force pursuant to the Asbestos Regulations. The Asbestos Regulations (which are not a substitute for BAT) are a further legislative control which ensures that the Proposed Activity at the DH Site and the MG Site cannot be undertaken if it would result in significant pollution. The Asbestos Regulations would be fully complied with by the Proposed Activity and the at the DH Site and the MG Site.
- 9.54. The Appellant will contend that the EA has adopted an erroneous and internally inconsistent approach; the EA accepts that it is lawful and appropriate for exactly the same activities to be undertaken at sites where a mobile treatment licence has been issued. This directly conflicts with the EA's allegation, set out in the DD for DH EP1, that the Proposed Activity, would result in significant pollution risks when proposed at a stationary installation. The apparent distinction relied upon by the EA (in so far as it is possible to currently understand their case on this point) that BAT does not apply to a mobile installation flies in the face of the EA's statutory obligations pursuant to the Environment Act 1996. The Appellant will contend that the EA's approach to mobile treatment licences is equally relevant to the appeal against the Decision Documents; the conditions imposed therein by the EA are unjustified and unreasonable and directly conflict with the approach taken to mobile treatment licenses where precisely the same activities are undertaken. Furthermore, they will

effectively render the Proposed Activity at the DH Site and the MG Site entirely unviable.

- 9.55. In accordance with the proposed operational controls as set out in the Application Documents and the provisions of the EMP²⁰ and the DEMP for MG Site, the Appellant will demonstrate by way of expert evidence, that all necessary measures will be taken to prevent accidents and limit their consequences.
- 9.56. The Appellant will demonstrate that there is strong policy and regulatory support for the Proposed Activity at the DH Site and the MG Site, which will result in the recovery and appropriate re-use of the soil and reduction of hazardous waste volumes to landfill. The Appellant will adduce expert evidence to demonstrate the pressing need for treatment of soils contaminated with asbestos, arising from the Construction and Demolition sector, and for suitable soils to be available for the purposes of landfill restoration. Disposing of ACMs in hazardous landfill, where treatment options are available to remove hazardous waste fractions, would conflict with the Appellant's legislative duties, result in wider environmental disbenefits overall and would be contrary to the furtherance of the waste hierarchy.
- 9.57. The Decision Documents for the DH EP2 and the the MG EP contain inconsistent conditions. The differences within Schedule 1 – Operations include:
- 9.57.1. AR6 in Table S1.1 of the MG EP states: *A maximum treatment capacity of 38,000 tonnes at any one time.* AR4 in Table S1.1 of the DH EP2 does not state the same;
- 9.57.2. AR3A in Table S1.1 of the DH EP2 states: *From treatment of soils impacted with identifiable pieces of bonded asbestos, by handpicking of bonded asbestos only, or by 3-way screener into oversize, medium size and silt-sized fractions prior to handpicking of bonded asbestos from the medium fraction, to storage of recovered soils and separated bonded asbestos. Screening and handpicking shall take place in a building on an impermeable surface with a sealed drainage system. The screener shall be enclosed. Handpicking shall take place in a dedicated enclosed picking line. No more than 100 tonnes per day of soils impacted with identifiable pieces of bonded asbestos shall be treated (in aggregate). The screening and handpicking of asbestos impacted wastes shall not increase the asbestos fibre load in the waste. Storage of screened waste not impacted with asbestos shall be stored*

²⁰ For clarification, the relevant EMP document number is: 3982-CAU-XX-XX-RP-V-0307.A0-C3 EMP

outside in bays or in a building. Screened soil impacted with asbestos shall be stored inside a building in a way that minimises asbestos fibre emissions such as spraying and sheeting. Separated bonded asbestos fragments shall be bagged whilst handpicking is in progress. Once handpicked asbestos shall be stored double bagged in sealed, closed and locked containers. Treated waste shall be stored for no longer than 6 months prior to transfer offsite or to the landfill as cover. No more than 10 tonnes of picked asbestos shall be stored on site. No more than 1000 tonnes of treated soils shall be stored on site. Non-hazardous treated soils shall be kept separate from hazardous soils. AR5 of Table S1.1 of the MG EP does not state the same.

9.57.3. AR4 of Table S1.1 of the MG EP permits: *A maximum treatment capacity of 38,000 tonnes at any one time. However the DH EP2 limits treatment capacity to no more than 100 tonnes per day.*

9.58. There is therefore a great deal of inconsistency between the two varied permits for the DH Site and the MG Site, despite the EA stating its reasons for varying the MG Permit were to ensure consistency. The Appellant will further address the inconsistencies between the MG EP and DH EP2 in its evidence and reserves the right to respond to any evidence and/or justification which the EA seeks to rely upon in respect of the same.

10. CONCLUSION

10.1. The Appellant's expert evidence will address in respect of Appeal One, Appeal Two and Appeal Three:

10.1.1. The correct interpretation, requirements and application of BAT, including the relevance of the WFD and Article 11 of the IED;

10.1.2. A detailed assessment of the Proposed Activity at the DH Site and the MG Site and the proposed operational controls which will be deployed and their compliance with BAT;

10.1.3. The need for the Proposed Activity at the DH Site and the MG Site and the wider environmental context in support of the Appeal including the need to protect hazardous waste landfill capacity;

10.1.4. Whether the Proposed Activity at the DH Site and the MG Site will be likely to give rise to significant pollution. The Appellant will demonstrate that the Proposed Activity at the DH Site and the MG Site will not give rise to significant pollution and any risks arising from the Proposed Activity at the DH Site and the MG Site will be negligible. Expert evidence will be called to assess and quantify the risk arising from the treatment of asbestos contaminated soils as a result of the Proposed Activity at the DH Site and the MG Site and will include:

10.1.4.1. A detailed review of the evidence base regarding the risks arising from the treatment of asbestos contaminated soils, in particular relating to soils contaminated with bound asbestos;

10.1.4.2. Best practice when treating asbestos contaminated soils and their application/relevance to the Proposed Activity;

10.1.4.3. Detailed analysis of the critical factors which determine the risks of asbestos fibres from the treatment of asbestos contaminated soils and how these relate to the Proposed Activity;

10.1.4.4. Assessment of the results of extensive asbestos fibre monitoring data from comparable sites;

10.1.4.5. Detailed analysis of the emissions which are likely to arise from the Proposed Activity, the risk of any such emissions to relevant sensitive receptors, demonstrating that the risks are negligible, even when sensitivity tests are applied so as to result in a conservative 'worst case' assessment.

10.2. The Appellant will, in reliance on all of the above, conclude that the Proposed Activity at the DH Site and the MG Site will be in full compliance with BAT and Article 11 of the IED.

10.3. The Appellant will demonstrate that granting permission for the Proposed Activity at the DH Site and the MG would be in full accordance with the principles of BAT and the objectives of the IED, including the furtherance of the waste hierarchy. The Appellant will demonstrate that the Proposed Activity at the DH Site and the MG Site will prevent or reduce to a minimum the overall impact of any emissions on the environment and the risks to it and will adduce expert evidence to demonstrate it will not result in significant pollution. Additionally, the Appellant will adduce expert evidence in relation to air dispersion modelling to derive Dispersion Factors in respect of both DH Site and the MG Site and will address how this relates to the issue of risks of any significant pollution occurring.

- 10.4. The Appellant will therefore respectfully request that its Appeals be upheld and that the Environmental Permits for both the DH Site and the MG Site be varied so as to include the Proposed Activity in accordance with the documents submitted in support of the respective applications for the DH Site and the MG Site (as amended by the Appeals).
- 10.5. Furthermore, the Appellant agrees that the documents to be approved, should the appeal be allowed, will be based on the updated EMP to incorporate the provision of spray rails on the input conveyors (which were proposed by the Appellant during the Daneshill application process but not incorporated into the Daneshill submission documents)²¹.
- 10.6. Accordingly, the Appellant will respectfully request that the Inspector: i) allows its Appeals; and ii) varies the Environmental Permits so as to grant consent for the Proposed Activity to proceed at the DH Site and MG Site in order that it may proceed without further delay.
- 10.7. The Appellant reserves the right to call additional expert and/or other evidence (in addition to that particularised in this SoC and/or its GoA for the Appeals) in support of its appeal by way of rebuttal to the EA's case, once the EA has particularised the same.

FREETHS LLP
29 January 2024

²¹ DH 3982-CAU-XX-XX-RP-V-0307.A0-C3 EMP