FREETHS

Daneshill Landfill Site

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

REGARDING DANESHILL SOIL TREATMENT FACILITY AT DANEHSILL LANDFILL SITE

GROUNDS OF APPEAL

ON BEHALF OF FCC RECYCLING (UK) LIMITED

Grounds of Appeal

1. INTRODUCTION

1.1. Freeths LLP is instructed to act on behalf of FCC Recycling (UK) Limited ("the Appellant"), in relation to an appeal pursuant to Regulation 31 of The Environmental Permitting (England and Wales) Regulations 2016 ("the Regulations").

1.2. The Appellant is appealing the Environment Agency's ("the EA") refusal of an application to vary environment permit reference EPR/NP3538MF ("the EP") to allow for the treatment of asbestos contaminated soils at Daneshill Landfill Site ("the Site").

2. PROCEDURAL BACKGROUND

2.1. The variation application for the EP was made on behalf of the Appellant, by Caulmert (the Appellant's consultant) on January 2021 ("the Application") and included the proposal to establish a soil treatment facility for the recovery of asbestos contaminated soils at the Site[1] ("the STF"). It should be noted that the STF falls within the Site, but is contained to a smaller area within the same.

2.2. The Application was confirmed to be 'duly made' on 16 July 2021.

2.3. A Schedule 5 Notice was issued by the EA on 6 August 2021 requesting the submission of further information, including extensive information regarding the details proposed for the handling of asbestos contaminated soils.

2.4. A response to a Schedule 5 Notice, served by the EA, was submitted by Caulmert on 1 October 2021 ("the Response").

2.5. In addition to the Response, an amended Environment Management Plan ("the October EMP") was also submitted (updating the first version of the EMP submitted in January 2021). The October EMP made clear that 'reference background levels'[2] of respirable asbestos fibres in air would be ascertained by pre-operational baseline monitoring prior to any works being undertaken, with the operational techniques (in

[1] The Application also proposed the STF would treat other hazardous waste streams and this aspect of the Application was approved by the EA.
[2] As defined in the October EMP

compliance with BAT) ensuring (via the proposed rigorous monitoring strategy) that no increase of asbestos would occur over and above 'reference background levels'.[3]

2.6. Following submission of the Response, the EA's officer, Katie Dunmore, informed Caulmert via email dated 25 November 2021 ("the Email") that the Response did not adequately address the Schedule 5 Notice in so far as it related to asbestos management.

2.7. The Email effectively refuses a request from Caulmert for a meeting with Katie Dunmore and Chris Hall (EA Officer) instead directing that: "the operator must reconsider the relevant sections of the Schedule 5 notice highlighted above explaining how BAT will be achieved for the asbestos activity at this location." Reference is also made in the Email to a meeting, "to be held between the operator and their account manager Claire Roberts" and Ms Dunmore goes on to state, "I have flagged our concerns for this application with Claire and I believe this will be raised at the meeting".

2.8. In February 2022, Caulmert provided further information to the EA regarding BAT14 for the proposed treatment and recovery of asbestos contaminated soils ("the BAT14 Document"[4]). Following the submission of the BAT14 Document, Caulmert chased the EA for a response by email dated 27 April 2022 (from Andy Stocks to Katie Dunmore). A response was received from Katie Dunmore, dated 5 May 2022, which stated: "Given we need a wider EA approach to the asbestos screening activity I have referred it to our technical leads. It is in hand, I'll be in touch when a decision is confirmed".

2.9. The next communication from the EA is the email from Katie Dunmore, dated 21 October 2022 ("the October 2022 Email"), and informs Caulmert that draft decisions for the Application have been placed on 'Citizenspace' for consultation until 17 November 2022. The draft decision notice (which is similar in its terms to the final version) indicated that the EA intended to refuse permission for the Appellant to undertake the proposed recovery activity of treating asbestos contaminated soils. In the October 2022 Email, Ms Dunmore goes on to state, "After reviewing the decision and given the level of interest it was considered advertising was the most appropriate course of action. I'll be in touch after the process closes".

[3] See, for example, paragraph 9.1.2, page 26 of the EMP.
[4] See undated document titled, "BAT14".

2.10. The variation for the STF was granted on 2 December 2022 resulting in the amendment of the EP (variation application no: EPR/NP3538MF/V009) ("the Amended EP"). However, the processing of asbestos contaminated soils was specifically excluded from the permitted activities for the STF.

2.11. During the determination process, the EA did not provide any direct feedback or consultation response to the Appellant (or its consultant) from its internal "technical lead". The Appellant's request for a meeting to discuss the technical aspects of the proposed activity was refused. Accordingly, to date, the EA has not disclosed to the Appellant the advice it received from its internal "technical lead". The Appellant has had no opportunity to review, consider, analyse or respond to the consultation response from the EA's internal "technical lead"[5].

2.12. Issued alongside the Amended EP, the Decision Notice sets out the EA's reasons for refusing the proposed treatment of asbestos contaminated soils as part of the STF.

3. REASONS FOR REFUSAL

3.1. The Decision Notice ("the DN") states:

"We have refused the proposal outlined in the application to accept and treat soils containing asbestos under EWC 17 06 05. As the facility is an installation under the Environmental Permitting (England and Wales) Regulations 2010 we must exercise our functions to achieve a high level of protection for the environment taken as a whole, by in particular preventing or where that is not practicable reducing emissions into air, water and land. We also need to ensure compliance with Article 11 of the Industrial Emissions Directive 2010/75/EU (IED) which requires the use of Best Available Techniques to reduce emissions and the impact on the environment as a whole.*

The operator proposed that only soils containing bound asbestos would be accepted for treatment. They state that bound material is considered in a cement matrix consisting of visible fragments. The operator also proposed the following operating techniques for the waste stream:

- *Segregated storage and processing area for asbestos contaminated soils.*
- *Stockpiles covered with tarpaulins.*

[5] Indeed, the Appellant has not even been informed who this is within the EA.

• Asbestos contaminated soils to be screened using a three-way screener. The screener and conveyers of the screener will be covered and linked to a HEPA filter. Monitoring to be undertaken at the filter.

• Post screening soils to travel along an input conveyer with spray rail to a covered picking station, visible fragments of asbestos to be hand-picked and placed in polythene bags prior to deposit within locked skips.

• Dust suppression to be in place to dampen stockpiles and during loading and unloading activities.

The purpose of soil treatment is to enable reuse of soil for the restoration of the wider landfill site. The picked asbestos pieces would be sent to hazardous landfill for disposal.

Annex II of IED lists asbestos (suspended particulate, fibres) as a polluting substance to air. We consider that the proposed operation poses a risk of generating airborne fibrous asbestos fibres**. Asbestos from fibrous or damaged/broken bonded asbestos can easily become airborne during handling and treatment. The inhalation of asbestos fibres can cause serious illness and significant harm to human health including malignant lung cancer.* Any release of fibres would create a risk to human health as there is no safe lower limit. Therefore, *having regard to the nature of the potential emissions and the need to prevent them to ensure the waste management of asbestos is carried out without endangering human health or without harming the environment, **it is essential that the handling of waste containing asbestos is kept to a minimum to avoid the risk of release of asbestos.

***Where waste soil is treated in fixed plant, Best Available Techniques (BAT) applies as described in the Waste Treatment BATC 2018**. Relevant appropriate measures should be used as identified in Sector Guidance EPR S5.06 "Guidance for the Recovery of Hazardous and Non-Hazardous Waste S5.06 and supplemented by document "Hazardous Waste Soil Treatment".*

*In accordance with the Industrial Emissions Directive, **BAT is to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it**. **We do not consider that the proposed operating techniques for the storage, handling and treatment of asbestos waste represent BAT.** We consider that **the storage, handling and treatment of asbestos wastes in the manner proposed increase the risk of airborne fibres being released into the***

environment. The proposed method of treatment is not considered to be acceptable and the operator has not provided justification that there are benefits from the proposed treatment which would outweigh the risks.

We consider that ***the screening process proposed by the operator is likely to agitate the waste and result in the generation of asbestos fibres****. The operator has provided details of a covered three-way screen linked to HEPA filter in which treatment will be undertaken. This however will* ***eject soils potentially with a higher fibre content than when they were received on site****.*

The soils would then be subject to hand picking for asbestos fragments within a mobile picking station. Spray rails for damping down would be used on the input conveyers for dust suppression.

Annex II of IED lists asbestos (suspended particles, fibres) as a polluting substance to air. ***We consider that the proposed operation poses a risk of generating airborne asbestos fibres. Degraded and damaged waste will be friable and will pose a risk of releasing asbestos fibres. This will be further compounded by handling and treatment.***

We consider the mechanical screening process proposed by the operator is likely to agitate the waste and result in the generation of asbestos fibres*.* ***Such fibres from damaged/broken bonded asbestos can easily become airborne during treatment****.* ***The screening of such waste will break the asbestos pieces and release fibres.*** *The inhalation of asbestos fibres can cause serious illness and significant harm to human health including malignant lung cancer.* ***Any increase and/or agitation of fibres would create a risk to human health as there is no safe lower limit.*** *Therefore, having regard to the nature of the potential emissions and the need to prevent them to ensure the waste management of asbestos is carried out without endangering human health of [sic] without harming the environment,* ***it is essential the handling of waste containing asbestos is kept to a minimum to avoid the risk of any release of asbestos****."* (emphasis added)

4. BACKGROUND AND SUMMARY OF PROPOSED ACTIVITY

4.1. The Site is an existing non-hazardous waste landfill which is undergoing restoration. The landfill operates pursuant to a ROMP[6], which will expire in 2048. The Appellant's

[6] Review of Old Minerals Permission

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).

4.2. Details of potentially sensitive receptors near to the Site (within 500m) are included within the Amenity and Accidents Risk Assessment[7] and include a nearby travellers site, residential properties off Daneshill Road and recreational sailing club.

4.3. As granted by the EA, the Amended EP permits the STF (excluding asbestos contaminated wastes) to treat up to 29,999 tonnes of hazardous waste for use in the wider landfill restoration at the Site. Accordingly, the EA is satisfied that the Appellant has complied with BAT in respect of all activities for which the Amended EP has been granted, including the appropriate management of deposited (i.e. disamenity) dust and smaller particular emissions (for example PM_{10}, $PM_{2.5}$) from the treatment of hazardous waste for use in the restoration scheme.

4.4. If this appeal is allowed, the STF would also receive asbestos contaminated soils which are classified as hazardous waste (in addition to the hazardous waste streams already authorised by the Amended EP) which can be treated effectively to ultimately recover soil with a non-hazardous waste classification. A maximum of 29,999 tonnes per annum of hazardous waste would be brought into the Site. Additionally, 20,001 tonnes of non-hazardous waste will be imported to the Site annually equating to a total annual importation of 50,000 tonnes. These waste volumes have been assessed based upon the requirements of the local industries from which the waste arisings result, with the objective that the Site can be restored in a proposed 10-year time period.

4.5. In the event that treatment of soils contaminated with bonded asbestos cannot be treated at the STF, for re-use in the restoration of the landfill at the Site, it is highly likely that this waste stream will have to be sent to hazardous waste landfill. The opportunity to efficiently recover and recycle the soil, in accordance with the waste hierarchy, to enable the restoration of the landfill at Site, would be lost. There is a defined need in the local construction industry for a compliant and cost-effective treatment solution for soils contaminated with bonded asbestos.

[7] See Table 1, page 2 of the Amenity and Accidents Risk Assessment, dated January 2021, submitted in support of the Application.

4.6. The importation of asbestos contaminated soils and their remediation via the STF for re-use in restoring the landfill at the Site ("the Proposed Activity"), is a key aspect of securing the 10 year timescale for completion of the landfill. If achieved this would likely bring forward the cessation of landfilling activities by over 10 years compared to the 'end date' of the ROMP and the environmental benefits which would flow from: i) the early cessation of landfilling activities and ii) the creation of the final restoration scheme.

4.7. The Proposed Activity would be undertaken on behalf of the Appellant by Provectus Soil Management Ltd ("Provectus"). Provectus specialise in the remediation of asbestos contaminated soils and (amongst other sites) currently operate a soil treatment facility with a treatment licence deployed for the treatment of asbestos contaminated soils at the Appellant's site at Maw Green. The Maw Green soil treatment operation uses precisely the same methodology as proposed for the STF at the Site.

4.8. Clear acceptance protocols are proposed for the Proposed Activity as set out in the proposed Soil Reception Procedure[8] ("the SRP"). The SRP prescribes measures to ensure that any asbestos contaminated soils accepted for treatment at the STF are limited to bonded asbestos only, such as asbestos cement, and states that in the event any load containing, "any form of asbestos insulation/unbound asbestos types the load will then be immediately rejected".

4.9. Following preliminary acceptance, against the producer's waste description, asbestos contaminated soils will not be formally accepted for treatment at the STF until further analysis has been undertaken and approved in accordance with the Soil Characterisation Procedure[9] ("the SCP"). The SCP provides for sampling to be undertaken to quantify asbestos fibres in soil from each individual job (utilising the unique authorisation code for the same) at a prescribed minimum frequency: one sample for less than 100 tonnes; 2 samples for 100-500 tonnes; 2 samples for over 500 tonnes, plus 1 further sample for every additional 500 tonnes. Chemical testing is then undertaken to confirm maximum concentrations of i) free dispersed chrysotile asbestos fibres at less than 0.1% w/w, and ii) free dispersed amphibole asbestos fibres at less than 0.01% w/w. In addition, visual inspection of soils also confirms that

[8] Ref: STC – W1 002 – Rev 6, dated 1 September 2021
[9] Ref: STC – W1 003 – Rev 7, dated 1 September 2021

asbestos insulation/unbound asbestos is entirely absent from any soils which are accepted for treatment at the STF.

4.10. Any loads which do not prescribe to the specified threshold levels set out in the SCP will be rejected. Whilst testing is awaited, the asbestos contaminated soils are to be stored in a segregated area on the Site and will remain covered to further prevent and minimise any escape of emissions.

4.11. Once the full acceptance protocol has been completed, the soils containing incidental levels of bonded asbestos are subjected to mechanical screening which takes place outdoors (as opposed to within the confines of a building). Monitoring for airborne asbestos fibres at the location of the mechanical screener, to ensure the efficacy of BAT, is proposed.

4.12. Thereafter, the soils are transferred to a covered conveyor picking line to facilitate the final handpicking of any visible bonded asbestos fragments. Once picking has been completed, the recovered soils are inspected and subjected to further testing for asbestos levels prior to being used as part of the wider landfill restoration scheme at the Site.

4.13. Alongside extensive operational controls through the treatment process, a robust monitoring regime is proposed to ensure that fugitive airborne asbestos fibres are not emitted from the treatment of asbestos contaminated soils. The October EMP sets out the proposed monitoring frequency (Table 5)[10]. The details are further encapsulated in the draft 'Outline Asbestos in Air Monitoring Strategy and Methodology'[11] ("the Methodology") and proposed routine monitoring 'at source' (i.e. where the asbestos contaminated soil is being treated) and at specified boundary locations. The proposed Limit of Quantification ("LOQ") for 'routine activity monitoring' is 0.002 fibres/ml and for 'routine boundary monitoring' is 0.0005 fibres/ml (assessed using phase contrast optical microscopy). Where monitoring indicates that the proposed monitoring thresholds are being approached or exceeded, Alert Levels have been set and clear actions are prescribed including a review of operational and environmental parameters and, in the case of an exceedance of 0.002 fibres/ml, the immediate cessation of all asbestos related activities until the cause of the exceedance has been identified and repeat monitoring indicates that operations may resume.

[10] See Table 5, page 26 of the October EMP.
[11] Appendix A of the Remedia Report dated March 2021

4.14. In support of this appeal, the Appellant's expert evidence will provide full and comprehensive details of the Proposed Activity, drawing upon and referring to the details submitted with the Application. This evidence will further elucidate and support the Appellant's case that the Proposed Activity will, if granted on appeal, be fully compliant with the relevant requirements of BAT.

4.15. Furthermore, the Appellant will adduce expert evidence to provide an overview of the need for the remediation of asbestos contaminated soils in the UK, so as to preserve scarce hazardous waste landfill capacity in the UK and ensure the wider objectives of the waste hierarchy 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 asbestos contaminated soils, to demonstrate that the Proposed Activity is in full accordance with best practice and industry standards.

5. RELEVANT LEGAL PRINCIPLES

5.1. An overview of the relevant legal principles and guidance, so far as is relevant to the Appeal, is set out below.

5.2. The Appellant reserves the right to add or amend to its case by way of legal submissions and refer to any other statutory provisions, case law, and regulatory guidance as may be relevant to the Appeal.

5.3. The Appellant further reserves the right to respond to any matters of law and/or guidance raised by the EA, once the Appellant has had sight of the EA's case.

5.4. It is noted that, in the DN, the EA refers to a document titled, "Hazardous Waste Soil Treatment". This document does not appear to be publicly available. Should the EA continue to rely on this document, the Appellant respectfully requests that a full copy be made available to it.

Legislation

5.5. EU Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) ("the IED"): "lays down rules on integrated prevention and control of pollution arising from industrial emissions"..."It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to

prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole."[12]

5.6. The effect of Articles 10 and 11 of the IED is that "installations"[13] which involve the recovery of hazardous waste by physico-chemical treatment and have a capacity exceeding 10 tonnes per day are required to apply "the best available techniques" hereinafter referred to as "BAT".

5.7. In addition to the application of BAT, Article 11 further requires that installations must be operated (so far as is relevant) "in accordance with the following principles":

5.7.1. All appropriate preventative measures are taken against pollution;

5.7.2. No significant pollution is caused;

5.7.3. The generation of waste is prevented in accordance with Directive 2008/98/EC[14];

5.7.4. Where waste is generated it is in order of priority and in accordance with Directive 2008/98/EC[15], 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;

5.7.5. The necessary measures are taken to prevents accidents and limit their consequences.

5.8. BAT is defined in the IED and means:

[12] Article 1 of the WID.
[13] Defined as a "stationary technical unit".
[14] As amended
[15] As amended

"the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole:

(a) 'techniques' includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;

(b) 'available techniques' means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;

(c) 'best' means most effective in achieving a high general level of protection of the environment as a whole;"

5.9. In granting a permit for an installation to which the IED applies, Article 14 requires:

"...that the permit includes all measures necessary for compliance with the requirements of Articles 11 and 18.

Those measures shall include at least the following:

(a) emission limit values for polluting substances listed in Annex II, and for other polluting substances, which are likely to be emitted from the installation concerned in significant quantities, having regard to their nature and their potential to transfer pollution from one medium to another;"

5.10. Annex II of the IED includes asbestos (suspended particles, fibres) within the 'list' of polluting substances.

5.11. Annex III of the IED sets out criteria for use by Members States for determining BAT and specifically includes:

5.11.1. "the furthering of recovering and recycling of substances generated and used in the process and of waste, where appropriate";

5.11.2. "the nature, effects and volume of the emissions concerned";

5.11.3. "the need to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it".

5.12. Article 13 of the IED makes provision for harmonised decisions on BAT for certain activities by way of BAT reference documents and for Decisions on BAT conclusions to be issued.

5.13. The BREF for Waste Treatment[16] ("the BREF") does not specifically deal with BAT for the removal of asbestos from contaminated soils for the purpose of recovering those soils for further use. Alongside, the BAT conclusion for waste treatment[17] ("the BAT Conclusion"), the BREF sets out 20 'General BAT Conclusions' including techniques to be adopted for ensuring 'overall environmental performance' and managing 'diffuse emissions to air'.

5.14. In particular, it should be noted that the BREF and the BAT Conclusion prescribe requirements for management and operational procedures as part of BAT, such as waste acceptance protocols, implementation of Environmental Management Systems, waste stream management and accident management plans.

5.15. BAT 14 (of the BREF and the BAT Conclusion) relates specifically to diffuse emissions to air and states that:

"In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of techniques given below. Depending on the risk posed by the waste in terms of diffuse emissions to air, BAT 14d is especially relevant".

5.16. In so far as is relevant, BAT 14 "includes" the following techniques:

[16] Best Available Techniques (BAT) Reference Document for Waste Treatment 2018
[17] Commission Implementing Decision (EU) 2018/1147 dated 10 August 2018

5.16.1. BAT14 (a) – minimising the number of potential diffuse emission sources; "this *includes* techniques such as: limiting the drop height of material; limiting traffic speed; using wind barriers;

5.16.2. BAT 14 (d) – containment, collection and treatment of diffuse emissions; "this *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"*; collecting and directing the emissions to an appropriate abatement system via an air extraction system;

5.16.3. BAT 14 (e) – "*dampening potential sources of diffuse dust emissions* (e.g. waste storage, traffic areas, *and open handling processes*) with water or fog".[18]

The Environmental Permitting (England and Wales) Regulations 2016 ("the EP Regs")

5.17. The EP Regs implement the IED into English law and have the effect, through the operation of Part 1 of Schedule 1 and Schedule 7 of requiring BAT to be applied for the grant of any environmental permit for an installation undertaking physico-chemical treatment of hazardous waste exceeding 10 tonnes per day (a Part A(1) activity).

5.18. Schedule 7 (5) in particular requires the regulator to exercise its relevant functions so as to ensure compliance with the key provisions of the IED, including Article 11.

The Environment Act 1995

5.19. The Environment Act 1995 ("the EA 1995") established and sets out the duties of the EA; the following provisions are particularly relevant:

"Chapter 1 Section 4.— Principal aim and objectives of the Agency.
(1) It shall be the principal aim of the Agency (subject to and in accordance with the provisions of this Act or any other enactment and taking into account any likely costs) in discharging its functions so to protect or enhance the environment, taken as a whole, as to make the contribution towards attaining the objective of achieving sustainable development mentioned in subsection (3) below;

Chapter 1A Section 5.— General functions with respect to pollution control.

[18] All emphasis added.

(1) [An appropriate agency's] pollution control powers shall be exercisable for the purpose of preventing or minimising, or remedying or mitigating the effects of, pollution of the environment.

(4) [An appropriate agency] shall follow developments in technology and techniques for preventing or minimising, or remedying or mitigating the effects or, pollution of the environment."

The Control of Asbestos Regulations 2012 ("the Asbestos Regulations")[19]

5.20. Regulation 11(1) of the Asbestos Regulations provides that:

"(a) Every employer must 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..."

5.21. Regulation 16 of the Asbestos Regulations provides that:

"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."

Relevant Guidance

Guidance for Regulated Facilities with and Environmental Permit to Treat or Transfer Chemical Waste ("the Appropriate Measures Guidance")[20]

5.22. Reference will be made to the Appropriate Measures Guidance and the Appellant's expert evidence will demonstrate that the Proposed Activity is compliant with the same.

5.23. The Appellant will make reference to and rely upon the absence of any reference to the Appropriate Measures Guidance by the EA in the determination process of the Application and/or in the DN.

[19] SI 2012/632

[20] Published by the EA on 18 November 2020: Chemical waste: appropriate measures for permitted facilities - Guidance - GOV.UK (www.gov.uk)

Sector Guidance EPR S5.06 – Guidance for the recovery and disposal of hazardous and non-hazardous waste ("the Guidance")

5.24. The EA has not issued specific guidance regarding BAT for the treatment of asbestos contaminated soils.

5.25. Reference is made by the EA[21] to the Guidance notwithstanding that it has been superseded by the BREF and BAT Conclusion.

5.26. Section 2 of the Guidance sets out 'Techniques for Pollution Control including 'summarised' indicative BAT requirements. It highlights that:

"The indicative BAT requirements may not always be absolutely relevant or applicable to an individual installation, when taking into account site-specific factors, but will always provide a benchmark against which individual Applications can be assessed"[22].

5.27. The Guidance confirms that for all operations, ensuring pre-acceptance controls in accordance with BAT is critical, emphasising that emissions should be prevented through operational controls where at all possible.

5.28. Section 2.2.4 of the Guidance deals specifically with fugitive emissions to air. It notes that 'conveyors' are a common source of fugitive emissions to air, although the list provided is indicative only.

5.29. Asbestos is not specifically referred to within the Guidance, however, the indicative BAT requirements for dust are stated as:

"Dust - The following general techniques should be employed where appropriate:
- *Covering of skips and vessels*
- *Avoidance of outdoor or uncovered stockpiles (where possible)*
- *Where dust creation is unavoidable, use of sprays, binders, stockpile management techniques, windbreaks and so on*
- *Regular wheel and road cleaning (avoiding transfer of pollution to water and wind blow)*

[21] See reference to the Guidance by the EA in the DN (set out for ease of reference at paragraph 3.1 of these Grounds, above).
[22] See page 19 of the Guidance

• Closed conveyors, pneumatic or screw conveying (noting the higher energy needs), minimising drops. Filters on the conveyors to clean the transport air prior to release

• Regular housekeeping

• Enclosed silos (for storage of bulk powder materials) vented to fabric filters. The recycling of collected material should be considered under Section 2.6.

• Enclosed containers or sealed bags used for smaller quantities of fine materials."

WHO Air Quality Guidelines for Europe (dated 2000) ("the WHO Guidelines")

5.30. The WHO Guidelines, which are now over 20 years old, provide the following guidance on asbestos levels stating:

"Guidelines Asbestos is a proven human carcinogen (IARC Group 1). No safe level can be proposed for asbestos because a threshold is not known to exist. Exposure should therefore be kept as low as possible.

Several authors and working groups have produced estimates indicating that, with a lifetime exposure to 1000 F/m3 (0.0005 F/ml[23] or 500 F*/m3, optically measured) in a population of whom 30% are smokers, the excess risk due to lung cancer would be in the order of 10^{-6}–10^{-5}. For the same lifetime exposure, the mesothelioma risk for the general population would be in the range 10–5–10–4. These ranges are proposed with a view to providing adequate health protection, but their validity is difficult to judge. An attempt to calculate a "best" estimate for the lung cancer and mesothelioma risk is described above."*[24]

SoBRA Asbestos in Soil Human Health Risk Assessment (AiSHHRA) Toolbox, December 2021 ("the SoBRA Toolbox")

5.31. The SoBRA Toolbox was developed to aid the consistency and robustness of asbestos in soil risk assessments. It sets out a number of potential assessment tools which can be utilised to determine the level of risk exposure caused by a particular activity.

SoBRA Discussion Paper

[23] fibre concentrations based on optical microscopy are marked F*/m³. If concentrations measured by Phase Contrast Optical Microscopy (PCM) are to be compared with environmental fibre concentrations measured by a scanning electron microscope (SEM), a conversion factor has to be used: 2 F/m³ = 1 F*/m³.

[24] See page 133 of the Guidance

5.32. SoBRA also published a Discussion Paper on Guidelines for Airborne Concentrations of Asbestos Fibres in Ambient Air: Implications for Quantitative Risk Assessment, dated January 2021 ("the Discussion Paper"), with the aim of documenting, "the results of research and evaluation undertaken over the past year on air quality thresholds for asbestos in ambient air". The Discussion Paper identifies an absence of clear regulatory policy and technical guidance in the UK with regard to environmental thresholds for airborne asbestos fibres, unlike in some other countries, and it presents evidence for differentiating between chrysotile and amphiboles when considering the risk from exposure to asbestos fibres. It is evident from the Discussion Paper that the risk from chrysotile fibres is likely to be over-estimated by some published thresholds that do not distinguish between asbestos type. Related SoBRA guidance, and the Joint Industry Working Group's Decision Support Tools that were published to support the CL:AIRE Guidance, also point to a lower risk of airborne respirable fibres from bound cement asbestos products compared to more friable products.

5.33. The Discussion Paper concludes that:

"It is recommended that the linear version of the H&D model for pleural mesothelioma is used to estimate risk and calculate air guideline values in conjunction with the non-linear variants for peritoneal mesothelioma and lung cancer. SoBRA has developed an excel-based tool to implement both the non-linear and linear versions of the H&D model. This model is provided free to use via the SoBRA website.

It is evident from the assessment presented in this paper that there is a clear requirement for further research into background air concentrations in the UK. This is needed to be able to benchmark the practicability of proposed air guidelines. It is also evident that a step change in air monitoring practice is required; with a move away from the use of occupational monitoring techniques that typically report to 10000f/m3 (0.01f/ml) and use non-fibre-discriminatory PCM analysis to methods capable of measuring down to at least 10f/m3 using fibre-discriminatory SEM or Transmission Electron Microscopy (TEM) analysis (as advocated by the authors of CIRIA C733)."

<u>Asbestos in Soil – A Pan European Perspective; NICOLE 2021 ("the NICOLE Report")</u>

5.34. The purpose of the NICOLE Report is to provide an overview of best practice in the industry and examine some of existing clear standards and detailed guidance that exist in European countries regarding risks arising from asbestos in soil.

5.35. Case studies are provided within the NICOLE Report, in particular, it is noted that one such case study dealt with the demolition of remediation of a 44 acre foundry/iron works site in Ipswich[25]. Asbestos contaminated soil was fed into a three-way screener. The oversize material was proven to be suitable for reuse on site. The mid-size fraction was further processed via a handpicking station. Throughout the works, air was monitored to demonstrate control measures were suitable, allowing 65,000 tonnes of asbestos contaminated soil to be reclaimed, as opposed to disposed of in a hazardous landfill.

Control of Asbestos Regulations 2012 - Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials: Industry guidance ("the CL:AIRE Guidance")[26]

5.36. The CL:AIRE Guidance was prepared by the Joint Industry Working Group ("JIWG") on Asbestos in Soil and Construction & Demolition (C&D) Materials, supported by the Health and Safety Executive ("HSE"). The CL:AIRE Guidance is aimed at securing improvements within the brownfield and contaminated land industry.

5.37. The CL:AIRE Guidance, "contains industry-produced practitioners guidance"[27] to help employers comply with the Asbestos Regulations when undertaking work on soil and C&D materials that may be or are contaminated with asbestos. The CL:AIRE Guidance states that, "The primary aim of this guidance is to provide clarity about working with asbestos-contaminated soil and C&D materials. It outlines the steps that should be taken by clients, employers and others in the geoenvironmental management and construction sectors that have a duty to ensure that workers and others are not exposed to asbestos as a result of work in, on or with such materials".

5.38. The CL:AIRE Guidance is supported by JIWG decision tools[28], to which reference will be made by the Appellant in support of its case as required.

6. GROUNDS OF APPEAL

6.1. The Appellant's Grounds of Appeal are:

6.1.1. Ground One - the Proposed Activity complies with the requirements of BAT;

[25] See pages 39-41 of the NICOLE Report.
[26] CL:AIRE, 2016.
[27] See paragraph 2 of the CL:AIRE Guidance
[28] Asbestos in Soil (claire.co.uk)

6.1.2. Ground Two - the EA has misdirected itself in its interpretation and application of BAT, in particular BAT14 and BAT 14d;

6.1.3. Ground Three - Article 11 of the IED is complied with.

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

6.2. The Appellant will demonstrate that the Proposed Activity is fully compliant with BAT.

6.3. As set out in detail at the application stage, the Proposed Activity will be operated in accordance with stringent management and operational procedures to ensure that emissions are minimised, where possible, using appropriate techniques.

6.4. The Proposed Activity 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 operate facilities to strict internal controls so as to avoid, where at all possible, any asbestos related emissions.

6.5. The EA has not particularised why it considers that "the proposed operating techniques for the storage, handling and treatment of asbestos waste" do not represent BAT. The Appellant reserves the right to respond in full to any further particularisation of the EA's case in this respect.

6.6. The EA has failed to provide any evidence (technical or otherwise) to support its assertions in the Decision Notice that the Proposed Activity will result in increased amounts of asbestos fibres being released, as a result of the treatment process, or indeed to support any of the assertions made by the EA in the DN. The Appellant will demonstrate, via the analysis of robust monitoring data, that the EA's assertion is incorrect.

6.7. The Appellant will adduce expert evidence in support of its Appeal to fully assess all potential emission sources which arise from the Proposed Activity and demonstrate that BAT will be complied with throughout the 'life cycle' of the operation.

6.8. The EA has not published any guidance which addresses the requirements of BAT specifically in the context of the remediation of asbestos contaminated soils. The DN does not disclose any technical basis on which the EA relies to assert that BAT is not complied with and it has been unable, throughout the determination of the Application,

to identify what additional techniques would be appropriate for the Proposed Activity. The EA provides no justification whatsoever for its refusal in the DN, but simply makes a number of bold assertions which are unsupported by any evidence, technical or otherwise. The Appellant's expert evidence will address each of the EA's assertions in the DN in turn and demonstrate that the Proposed Activity complies with BAT.

6.9. 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.

6.10. The Appellant will further rely upon the EA's acceptance that the Appellant has demonstrated BAT is complied with in respect of any dust emissions arising from the activities which have been included within the Amended EP[29].

6.11. The Appellant reserves the right to respond to any new technical 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

6.12. The EA has adopted an erroneous interpretation of BAT14 which places undue reliance on selective parts of BAT14d.

6.13. Although not expressly stated in the DN, when considered as a whole, the EA's position appears to be that any proposal which falls short of all asbestos related activities being 'fully enclosed', with all asbestos emissions being 'collected and directed to an abatement system', is not compliant with BAT14.

6.14. It should be noted that the EA has not adopted any guidance nor adduced any evidence which would support any such assertion. 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.

[29] As referred to at paragraph 4.3 of these Grounds.

6.15. The Appellant will contend that, in order to comply with BAT, it is not necessary for the Proposed Activity to be 'fully enclosed' (in the manner which the EA appears to allege) and that such an interpretation would fail to ensure waste is managed in accordance with the waste hierarchy.

6.16. 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".

6.17. 8 separate techniques (a. to h.) are then set out within the BAT Conclusion as forming part of BAT14.

6.18. 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.

6.19. Determining whether a particular combination 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.

6.20. The Appellant's expert evidence will demonstrate that the Proposed Activity proposes to use a range of appropriate techniques which are specifically referenced within BAT14 including, for example[30]:

6.20.1. 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);

6.20.2. BAT14d – the Application proposes a number of containment measures will in fact be used including the storage of waste in partially enclosed bays, sheeting of waste awaiting treatment, the partial containment of the screener with abatement via HEPA filter, the containment of conveyor belts (in accordance with the manufacturers safety guidance for the

[30] N.B. BAT14 b, c and h are not relevant to the Appeal.

equipment) with abatement via HEPA filter, and the containment of the picking station with abatement via HEPA filter;

6.20.3. BAT14e – the Application proposes that the waste will be dampened throughout all stages of the waste being handled at the Site.

6.21. 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 is compliant with the same.

6.22. The Appellant will content 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.

6.23. The Appellant will demonstrate that it has investigated the availability of equipment specifically designed for the treatment of asbestos contaminated soils. 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; reference will be made to case studies (including but not limited to those within the NICOLE Report) in support of the Appeal.

6.24. The Appellant will contend that the EA's refusal to include the Proposed Activity within the Amended EP is seriously undermined by the absence of any specification as to why it considers the combination of techniques falling within BAT14 are not 'appropriate' having regarding the relevant facts.

(b) BAT14d

6.25. 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 waste which will be recovered by the Proposed Activity.

6.26. 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...".

6.27. Even where BAT14d is 'especially relevant', it does not require that all of the techniques described *must* be utilised in every case. The language suggests 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.

6.28. BAT14 directs both operators and regulators to carefully consider the relevance of BAT14d, in certain circumstances and does not prescribe the of BAT14d in every case. To take such an approach would be to divorce the application BAT from a proper understanding of the facts relating to a specific proposal, in direct contradiction to its meaning and purpose.

6.29. 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.

6.30. The wording of BAT14d explicitly provides not only for containment of activities within buildings, but also for particular aspects of activities to be enclosed, with the specific example of conveyors being provided. Accordingly the BAT Conclusion plainly envisages 'partial' enclosure of certain parts of equipment and processes as being in compliant with BAT14d. This is further reflected in the Guidance, which specifically references enclosure of conveyors as forming part of BAT in respect of dust emissions.

6.31. It is therefore erroneous to interpret BAT14d as requiring enclosure of activities within a building in every case. Such a conclusion is not supported by the wording of BAT14d itself.

6.32. 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.

6.33. The DN does 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.

6.34. Having regard to paragraphs 6.25 to 6.33 of these Grounds, the Appellant will contend that the EA has incorrectly interpreted and applied BAT14d. Construed properly, the Appellant will demonstrate that the Proposed Activity 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). Furthermore, the Appellant will contend that in reaching its decision, 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 refuse permission for the Proposed Activity.

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

6.35. As set out above, the Appellant will demonstrate that the Proposed Activity fully complies with BAT and that the EA's refusal in this case is predicated on an erroneous and unjustified interpretation of BAT.

6.36. The Appellant will adduce expert evidence to demonstrate that Article 11 of the IED is fully complied with by the Proposed Activity as:

6.36.1. All appropriate preventative measures are taken against pollution;

6.36.2. No significant pollution will be caused;

6.36.3. In accordance with Directive 2008/98/EC[31], the asbestos contaminated soils will be recovered for re-use;

6.36.4. Necessary measures are taken to prevents accidents and limit their consequences.

[31] As amended

6.37. The Appellant will adduce technical data to demonstrate, by way of expert evidence, that the Proposed Activity will not result in significant pollution.

6.38. The Appellant's expert evidence will address and explain the definition of hazardous waste in the context of asbestos contaminated soils 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.

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

6.40. 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 Site. The Appellant's expert evidence will demonstrate that the Proposed Activity 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 will not result in significant pollution.

6.41. 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.

6.42. 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 and the consultation response from the HSE. The Asbestos Regulations (which are not a substitute for BAT) are a further legislative control which ensures that the Proposed Activity cannot be undertaken if it would result in significant pollution. The Asbestos Regulations would be fully complied with by the Proposed Activity, as confirmed by the consultation response from the HSE.

6.43. The Appellant will demonstrate that the EA's decision to refuse to grant an Environmental Permit for the Proposed Activity is fundamentally in conflict with its

decisions on other sites and is entirely unjustified. It is simply wrong for the EA to contend that it is lawful and appropriate for exactly the same activities to be undertaken at sites where a mobile treatment licence has been issued, whilst alleging they 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) 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.

6.44. In accordance with the proposed operational controls, the provisions of the October EMP and the Methodology[32] the Appellant will demonstrate by way of expert evidence, that all necessary measures will be taken to prevent accidents and limit their consequences.

6.45. The Appellant will demonstrate that there is strong policy and regulatory support for the Proposed Activity, 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. Disposing of the asbestos contaminated soils in hazardous landfill will result in wider environmental disbenefits overall and is contrary to the furtherance of the waste hierarchy.

7. CONCLUSION

7.1. As already granted by the EA, the Amended EP permits the STF (excluding asbestos contaminated wastes) to treat up to 29,999 tonnes of hazardous waste for use in the wider landfill restoration. Accordingly, the EA is satisfied that the Appellant has complied with BAT in respect of all activities for which the Amended EP has been granted, including the appropriate management of deposited (i.e. disamenity) dust and smaller particular emissions (for example PM_{10}, $PM_{2.5}$) from the treatment of hazardous waste for use in the restoration scheme.

7.2. The Appellant will demonstrate that granting permission for the Proposed Activity 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 contend that the Proposed Activity will prevent or reduce to a minimum the overall impact of any

[32] See reference in paragraph 4.13 of these Grounds.

emissions on the environment and the risks to it and will adduce expert evidence to demonstrate it will not result in significant pollution.

7.3. The Appellant will therefore respectfully request that its appeal be upheld and that the Amended EP is varied so as to include the Proposed Activity within its scope as applied for in accordance with the documents submitted in support of the Application (in so far as they apply to the Proposed Activity) including:

7.3.1. The October EMP; and

7.3.2. The following drawings:

7.3.2.1. 3982-CAU-XX-XX-DR-V-1803_S2_P07;

7.3.2.2. 3982-CAU-XX-XX-DR-V-1807_S2_P02;

7.3.2.3. 3982-CAU-XX-XX-DR-V-1810_S2_P01;

7.3.2.4. 3982-CAU-XX-XX-DR-V-1811_S2_P01;

7.3.2.5. 3982-CAU-XX-XX-DR-V-1812_S2_P01;

7.3.2.6. 3982-CAU-XX-XX-DR-V-1800-P02.

7.4. The Appellant reserves the right to call additional expert evidence (in addition to that particularised in these Grounds) in support of its appeal by way of rebuttal to the EA's case, once the EA has particularised the same.

FREETHS LLP

1 June 2023