APP/EPR 2016/636
APPEAL BY FCC RECYCLING (UK) LIMITED
ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2016
DANESHILL LANDFILL DANESHILL ROAD RETFORD NOTTINGHAMSHIRE DN22 8RB
ENVIRONMENT AGENCY RESPONSE TO APPELLANT'S STATEMENT
DATE: 24 July 2023

Contents

Section 1: Introduction

1. This is the Environment Agency's ("the Agency") statement in response to an appeal by FCC Recycling (UK) Limited, company number: 02674166, ("the Appellant"). The appeal is made under the provisions of Regulation 31 of the Environmental Permitting (England and Wales) Regulations 2016 ("EPR 2016").

2. The Appellant is appealing the Agency's decision dated 9 December 2022, to partially refuse application reference EPR/NP3538MF/V009, for a permit variation ("the permit") to accept and treat soils containing asbestos under EWC 17 06 05* at Daneshill Landfill Daneshill Road, Retford, Nottinghamshire, DN22 8RB. ("the site").

3. The activity proposed under the permit was to screen asbestos contaminated soils using a three way screener linked to a High-Efficiency Particulate Air filter ("HEPA filter"). Post screening, soils would travel along an input conveyer with spray rail to a covered picking station, where visible fragments of cement bonded asbestos would be hand-picked and placed in polythene bags prior to disposal within locked skips.

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

5. The Agency refused the activity on the grounds that the Appellant did not demonstrate that the transportation, dropping, handling and most significantly screening of asbestos soils would not break the asbestos pieces leading to fibre release into the soils and the environment. The outdoor nature of the activity would make boundary air monitoring difficult as it would be unlikely such monitoring would pick up fibre emissions or evidence of contamination.

6. The Agency highlighted concerns that the treatment methods proposed could lead to higher concentrations of asbestos fibres within the soils and air. The Appellant did not counter these points simply stating that fibre monitoring undertaken at another site had not demonstrated any concerns. This however does not remove the potential risk from these activities and the potential for the screening and handling processes to break the

asbestos and lead to emissions. They did not demonstrate that any fugitive emissions would be channelled and collected to appropriate abatement or that it was fully enclosed with air extraction systems. Monitoring for fugitive emissions from boundary locations would not provide meaningful results.

7. The Agency was therefore required to refuse the application and issued a Refusal Notice and Decision Document both of which were dated 9 December 2022.

8. The Agency did permit the bioremediation process applied for as part of the above variation. Organic pollutants such as petroleum hydrocarbons, polycyclic aromatic hydrocarbons and other volatile organic compounds ("VOCs") are broken down using additions along with bacteria and fungi are biodegraded into less harmful substances and to a point where they can be reused in the final restoration of the landfill.

9. Contaminated soils accepted for treatment would be arranged in biopiles over aeration pipes. The treatment surface consists of a geosynthetic clay lined pad with sand, crushed concrete and drainage infrastructure which drains to a collection pit before pumping to the on-site water treatment system.

10. Based on the contaminants present within the soil, nutrients such as ammoniacal nitrate and organic material such as woodchip are added to facilitate biodegradation. Optimum conditions will be created by controlling these nutrient levels along with parameters such as oxygen level, moisture content, pH levels and temperature.

11. The soils are arranged into bio-piles using a system of batches which allows the waste to be tracked by age from the point of origin to its location on the treatment pad. Soils are treated over an 8 to 16 week period depending upon the contaminants present. During this time the material will be turned every 4-8 weeks to facilitate aeration and reintroduce moisture as necessary.

12. The bioremediation process includes controls on gaseous and aqueous emissions which are written into the permit.

13. In order to permit this activity, the operator provided detailed operating techniques, drainage systems and water treatment systems. All of which allowed us to understand their activities and potential risks.

Section 2: The legal framework

14. As an installation the site is subject to the requirements of the Environmental Permitting (England and Wales) Regulations 2016 ("EPR 2016").

15. The proposed activity falls as a waste installation under Section 5.3 Part A(1)(a)(vi) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving recycling or reclamation of inorganic materials other than metals or metal compounds.

16. The provisions in Schedule 7 Part A Para 5(e) of the EPR 2016 regarding the regulation of installations include an obligation on the regulator to:

"exercise its relevant functions so as to ensure compliance with the following provisions of the Industrial Emissions Directive –
Article 5(1); Article 7; Article 8(2); Article 11; Article 13(7); Articles 14 to 18; Article 20(1) and (2); Article 22"

17. Article 5(1) requires that the Agency:

"shall grant a permit if the installation complies with the requirements of the Directive."

18. Article 11(a) requires:

"all the appropriate preventative measures are taken against pollution"

Article 11(b):

"the best available techniques are used"

and Article 11(c) requires that:

"no significant pollution is caused"

Best available techniques are known as BAT.

19. Article 14(1) requires:

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

Article 14(3) requires:

"BAT conclusions shall be the reference for setting the permit conditions."

Article 14(6) requires:

"*Where an activity or a type of production process carried out within an installation is not covered by any of the BAT conclusions or where those conclusions do not address all the potential environmental effects of the activity or process, the competent authority shall, after prior consultations with the operator, set the permit conditions on the basis of the best available techniques that it has determined for the activities or processes concerned, by giving special consideration to the criteria listed in Annex III."*

Annex III gives the "*Criteria for determining best available techniques*." Annex III (10) requires;

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

20. Article 18 requires:

"*Where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall be included in the permit, without prejudice to other measures which may be taken to comply with environmental quality standards.*"

21. Article 20(1) requires that the Agency:

"*shall take the necessary measures to ensure that the operator informs the [Agency] of any planned change in the nature or functioning, or an extension of the installation which may have consequences for the environment. Where appropriate, the [Agency] shall update the permit."*

22. BAT is defined in Schedule 7 Part A Para 6 of the EPR 2016 references. Its meaning is that given in Article 3(10) of the Industrial Emissions Directive, which is:

> "'*best available techniques' means 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;*"

23. Prior to 18 November 2020, the BAT for treatment and transfer of chemical wastes in England was given in Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste. Since 18 November 2020, the standards for such sites (that is BAT for installations and necessary measures for waste operations) is given in technical guidance Chemical Waste: appropriate measures for permitted facilities. The appropriate measures for the treatment of soils containing hazardous chemicals is covered under this guidance. We supplement the appropriate measures for soil treatment using an internally available document called "Hazardous Waste Soil Treatment."

Section 3: Reason for refusal

24. The purpose of the appropriate measures guidance (and that previously given in S5.06) is to explain the standards that are relevant to regulated facilities with an environmental permit to treat or transfer chemical waste. We do not consider that the proposed operating techniques for the storage, handling and treatment of asbestos waste outlined by the Appellant represent appropriate measures. We consider that the storage, handling and treatment of asbestos wastes in the manner proposed increases the risk of airborne fibres being released into the environment, either into the air or into the soil matrix. The proposed method of treatment is not considered to be acceptable and the Appellant has not provided justification that there are benefits from the proposed treatment which would outweigh the risks.

25. We consider that the screening process proposed by the operator is likely to agitate the waste, and result in the generation of asbestos fibres.

26. The operator subsequently provided details of a covered three-way screen in which treatment will be undertaken, linked to a HEPA filter but this does not fulfil our requirement for the screener to be fully enclosed. It is also likely that the screener would break up asbestos cement fragments and result in the release of additional asbestos fibres from the fragments into the screened/separated waste fractions.

27. The Appellant initially refused to provide any information on the screening process and after six months of the Agency requesting the information, the Appellant only provided very limited details on the screening process. The operations were not clearly thought out, presented or risk assessed despite the Appellant operating a similar site and having a similar activity permitted elsewhere. This permit is held by the Waste Regulation Group Ltd. For instance, whilst clear measures were provided on the operating techniques for the asbestos picking activity such as double bagging and placing the bagged pieces in lockable asbestos skips by hand, no information was provided as to how asbestos separated out, and possibly, broken by the screener would be handled, bagged, transferred etc.

28. Once screened, the medium sized screened 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. We have previously permitted sites to use an enclosed picking station for handpicking the asbestos fragments. Whilst there is some risk of fibre release from handpicking, this operation is less energetic than screening, in a wetted state and is likely to be much lower risk.

29. Asbestos is a carcinogenic and toxic substance. Asbestos fibres within degraded and damaged asbestos cement fragments are friable, and its screening poses a risk of releasing asbestos fibres. The process could also create smaller fragments of asbestos cement which would not be able to be hand-picked. Fragments must be easily visible to be picked out from the soils. This will be further compounded by handling and treatment. The fibre and fragment load of the soils may also be increased.

30. We consider that the mechanical screening process proposed by the Appellant 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 could 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[1]. 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 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.

Conclusions to reasons for refusal

31. We have applied the basic principles of BAT when assessing this determination as detailed above.

32. "*All the appropriate preventative measures are taken against pollution*"
We repeatedly asked what measures the Appellant was taking to prevent potential emissions from the proposed activity. They initially did not provide any specific mitigation referring to monitoring undertaken at another site as evidence why such measures were

[1] Refer to paragraph 38 below – Dangers of Asbestos Health and Safety Executive website.

not necessary. After many months of questioning the Appellant did provide an outline design for a covered three way screener. This may have acted as containment during the screening process. However, the three way screener had an open hopper and discharge points where waste would be dropped into stockpiles and subsequently moved by loadings shovel before deposit onto picking station conveyers. The equipment did not address the concern that the handling/dropping and screening could break the asbestos into small fragments, and release fibres. Nor did it address the concern of dropping soils and asbestos cement into open stockpiles. We did not consider that the Appellant was taking all appropriate preventative measures against pollution. We considered there was the potential for increased pollution.

33. "*The Best Available Techniques are used*"
In this instance, the key BAT measure was to capture and contain emissions from the soil treatment activities. As above we considered the screener may contain emissions whilst the soils pass through it. Further questioning and evidence from the operator may be required to understand how the HEPA filter would work to capture emissions during treatment given the hopper and ejection emission points. We however were not satisfied potential emissions would be captured or contained post treatment in the exposed asbestos cement and soil stockpiles on the open treatment pad.

34. "*No Significant Pollution is Caused*"
We could also not answer this question positively. As explained above, we consider there is potential for pollution. Fundamentally, pollution of asbestos has a significant risk to life. Whilst not specified by BAT, there is no safe level of asbestos within the environment and we would take the precautionary approach that there should be no pollution of asbestos fibres within the environment. We therefore take the stance that activities that may give rise to emissions should not be in an exposed environment. In addition the exposed nature of the works means it would be extremely difficult to identify if there was pollution because external air monitoring may not capture such emissions.

Section 4: Dangers of Asbestos

35. The following quotes are selected from the Health and Safety Executives ("HSE") Website and CL:AIRE Guidance and provide an understanding as to why the Environment Agency adopts a precautionary approach when permitting activities where asbestos is proposed for storage and treatment.

Health and Safety Executive Website.[2]

- *Asbestos kills around 5000 workers each year, more than the number of people killed on the roads.*

[2] *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.*

World Health Organization -Air Quality Guidelines for Europe, Second Edition. **Air quality guidelines for Europe, 2nd edition (who.int)**

- *Around 20 tradesmen die each week as a result of past exposure.*
- *When materials that contain asbestos are disturbed or damaged, fibres are released into the air. When these fibres are inhaled they cause serious disease. These diseases will not affect you immediately: they often take a long time to develop, but once diagnosed, it is often too late to do anything.*

CL:AIRE Guidance

- *Asbestos Containing Materials ("ACMs") that have been significantly damaged, such as by crushing or breaking and especially such ACMs found in Construction and Demolition Waste ("C&D") materials will be more likely to release fibres.*
- *Where asbestos fibres are firmly linked to the matrix they do not normally break down easily and do not tend to release fibres significant levels of fibres. These types of materials will only usually release fibres if work is carried out to damage the matrix, such as breaking asbestos cement sheets.*

Section 5: Permit Determination

36. The Environment Agency received the application on 5 February 2021. Following the receipt of additional information from the Appellant, the Agency duly made the application on 16 July 2021.

37. The application contained sufficient information to begin an assessment however it lacked enough detail and there were disparities between operational measures stated within documents. Of particular significance and considering our concerns regarding the dangers of asbestos materials, we considered the application did not recognise the potential dangers that asbestos fibre emissions could pose and provided limited mitigation measures akin to those expected at a non-hazardous facility. For instance, the Appellants Risk Assessment 3982-CAU-XX-XX-RP-V-0303-AO.C1 January 2021 stated emissions control for the mechanical screener would be water bowsers with dust suppression: "*if required*".

38. The Appellant did not include containment measures in their application. They relied upon waste acceptance procedures that only looked at whether the soils, excluding the asbestos fragments, were non-hazardous by their asbestos fibre content. They did not address the risks from movement of the waste on site and its treatment which could create and emit additional fibres.

39. For example this is a statement from within the Emissions Management Plan:
"The control of asbestos emissions is predominantly based upon only receiving soils that are proven to pose no potential for airborne emissions of asbestos fibres above the detection limit. Asbestos fibres are not generated on site above the detection limit, so no abatement system is required"

40. In addition, the application documents provided only a very basic outline for the site. With no details of fixed plant locations or key detail to understand how the very distinct activities of bioremediation and asbestos treatment sit together. With new and/or novel operations

the Agency would need to see rigid operating techniques that may then be included within the permit as a regulatory tool. During the determination process we raised questions via Schedule 5 or informal information request. We state concerns such as the potential for emissions and expect the operator to provide reassurance and mitigation, usually by accepting the risk and then proposing measures that will mitigate the risk. Simply refuting our concerns by stating there have been no issues on other sites is not acceptable to the Agency. Similarly, we do not generally engage in discussions regarding the development of technologies and techniques during permit determination. The Appellant must provide their operating techniques to the Agency for us to assess them.

41. Therefore, on 6 August 2021, the Environment Agency requested further information in a Notice issued under Schedule 5 of the Environmental Permitting (England and Wales) Regulations 2016 ("the Notice"). The Notice raised 46 questions with explanations as to why the information was required[3].

42. Following a telephone conversation on 13 September 2021 between the Agency and the Appellant, the Environment Agency received an email[4] from the Appellants Environmental Consultant.

43. The email confirmed the conversation between the Agency and Appellant namely that the Appellant would not be responding to any queries in relation to the asbestos screening activity as their response was: *"dependent upon a meeting with FCC and the EA."*

44. The Appellant holds a permit at Edwin Richards Quarry[5] which permits the use of a mechanical screener under strict pre-operational conditions for asbestos containing waste. It is understood from the background information presented at the time, that the Appellant was disputing the pre-operational conditions placed within this permit, having previously accepted them, and was now challenging them. They did not however formally appeal against the issued permit. The Appellant failed to comply with the pre-operational conditions and the Agency did not discharge the pre-operational conditions. Consequently, the permitted screening activity is currently not operational. Despite the fact that the Appellant failed to comply with the pre-operational conditions for the Edwin Richards Quarry site, the Appellant applied for a permit variation for Daneshill Landfill for an almost identical activity whilst providing no meaningful mitigation and then failed to respond to the Schedule 5 Notice by providing the required information.

45. We refused the Appellant request for a meeting because we were not entering into any further discussions regarding the above pre-operational conditions. It is understood that extensive conversation had already been held during the above permit determination. Our stance had been laid out and we required the operator to provide the information as requested. Our stance was the same here. That the Appellant should present their proposed operations in the manner agreed.

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[3] Appendix 1 Request for Further Information Notice issued on 6 August 20121 under Schedule 5 of the EPR 2016.

[4] Appendix 2 Email from the Appellant's environmental consultant to the Environment Agency sent 13 September 2021.

[5] Appendix 3 Copy of the permit for the Edwin Richards Quarry site.

46. This application contained very little information to begin any meaningful assessment of the activities. To put it simplistically, the operator provided a brief outline of the proposal, stating there were no risks and no requirements for mitigation. It wasn't a serious proposal and therefore direct conversation was not considered. They needed to provide the detail for us to assess, which was ultimately not provided.

47. In, addition the Appellant also offered to provide a video presentation of the screening process within the same email.

48. The Agency responded by return email[6] declining the video presentation and explaining that the Schedule 5 had been broken down into fine detail because we needed to understand the Appellants key operating procedures stating we require:

> *"written proposals that explain the procedures and working methods on site. These may then be tied into the permit as operating techniques and will form part of our decision."*

49. The email went on:

> *"I've broken down the Schedule 5 to the fine detail because this is necessary for the determination. The operator has to spell it out how they handle the soils to prevent agitation and fibre release…"*

50. On 1 October 2021, the Agency received the Appellant's response[7] to the Schedule 5 Notice. A response was provided for each question with the exception of question 12 where an explanation was required as to how asbestos soils are processed through a three-way screen in a way that eliminates asbestos fibre release from the soil and asbestos fragments as they pass through the screen:

> "*You must detail all proposed abatement techniques and demonstrate how this meets BAT14 with regards to the containment, collection and treatment of diffuse emissions*."

51. The Appellant response was:

> *"Soil screening and hand picking on mobile treatment licensed projects have always resulted in asbestos emissions being monitored below <0.01f/ml. The historic hand-picking operation undertaken at Edwin Richards Quarry has always been monitored to be below <0.01f/ml or where testing has been undertaken to lower detection limits, they have always been below <0.0005f/ml. The containment measures for the soil screener have been proposed to the permitting and compliance team (including Chris Hall) for agreement. Once the performance data for this containment system has been collected it will be sent at a later date for review."*

52. The activity at Edwin Richards Quarry was not performed in an enclosed vessel. Fugitive emissions are not controlled so it is not possible to capture the emissions from the process correctly. The purpose of the enclosure is to verify the emissions from the activity

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[6] Appendix 4 Email from the Environment Agency to the Appellant's consultant sent 13 September 2021.

[7] Appendix 5 The Appellant's response to the Notice issued on 6 August 2021 under Schedule 5 of the EPR 2016.

as they would be channelled to a point source. The Appellant's monitoring is therefore not relevant.

53. The Appellant failed to provide a response to question 16. This required an explanation of emissions abatement within the picking booth. The Appellant stating within their Emissions Management Plan that: *"asbestos fibres are not generated on site above the detection limit so no abatement system is required."* The Agency explained that:

> *"We disagree, screening and dropping from height will agitate and may break asbestos materials and lead to release of fibres. Dust suppression and "wetting solution" alone is not considered sufficient mitigation. You must demonstrate through detailed working procedures how asbestos soils are stored, treated and-handled to ensure the containment and collection of diffuse emissions. As stated in BAT we would expect techniques such as:*
> *- Storage and treatment in enclosed buildings and/or equipment*
> *- Maintaining enclosed equipment under adequate pressure*
> *- Collection and direction emissions to an adequate abatement system"*

54. The Appellant responded:

> "*Further details of the approach proposed to Chris Hall, Richard Hadley and Clive Wall that meet the principles of BAT as well as guidance document: Chemical Waste: Appropriate Measures for Permitted Sites, November 2020 will be forwarded once agreed for implementation at Edwin Richards Quarry under the permit pre-operation condition. The measures are designed to meet World Health Organisation ("WHO") air quality guidance levels for asbestos of <0.0005f/ml rather than the expected permit target of <0.01f/ml.*"

55. The quotation from the World Health Organisation 2000 states:

> *"…World Health Organisation (WHO) guidance on air quality (WHO, 2000) states that asbestos is a proven carcinogen for which no safe air concentration level can be proposed because a threshold is not known to exist. For contaminants of this type it is indicated that risk managers need to regulate at levels that result in an acceptable degree of risk and generally to keep exposures as low as possible (or prohibit). However, the WHO report does note that a number of groups [emphasis added] have proposed that limiting the concentration of asbestos in air to 0.0005 f/ml would provide adequate health protection. A lifetime exposure at this level is said to equate to a lifetime mesothelioma risk of the order of 10-5 to 10-4 and a lung cancer risk (assuming population 30% smokers) of the order of 10-6 to 10-5 (WHO, 2000)."*

56. The answers to these questions would help us form an understanding of how the Appellant intended to run the site in a way that seriously considered the potential risk from the asbestos materials they were handling. The Appellant's response to the Schedule 5 Notice showed a lack of thought and also caused concern that they were disputing clear conditions as stated in their Edwin Richards Quarry permit that they accepted prior to the permit's issue.

57. In addition, some of the Appellants Schedule 5 responses did not provide the robust measures expected or provide a justification as to why measures were not necessary. In some instances the Appellant refuted our concerns. For example:
Question 7 stated the Appellant must provide details of any additional measures in place to deal with waters captured from the asbestos treatment pad and asbestos wash down areas. We added:

> "*The water treatment proposed involves adsorption and settlement. Measures which will capture hydrocarbon contaminants and settle out sediments. They however will not capture asbestos fibres. We are concerned any fibres present in surface waters will pass through the treatment plant and potentially be reused or enter the wider environment.*"

58. The Appellant responded:

> *Asbestos is only accepted in a bound form. This means that it is encapsulated in a cement matrix as well as being present in soil. The presence of a bound matrix and soil has previously been expected to prevent the release of asbestos fibres into soil porewater. Fibre concentrations in soil are generally non-detect or below the detection limit of <0.001% in received soils. Water monitoring from asbestos process areas has not detected asbestos fibres to be present in effluent from asbestos processing areas. Therefore, no abatement of asbestos in effluent is required. (Appendix A for asbestos testing of water)*

59. Asbestos may be released and may end up in surface waters. We required the Appellant to have asbestos traps within their drainage system. Their response was considered to show a disregard for the potential emission from their activity and a poor attitude to risk.

60. Question 11 stated:

> "*your waste acceptance procedures must be revised to explain how asbestos soils will be received and deposited into the quarantine and storage areas in a way that minimises dust emissions. You must also provide details of the maximum quantity of waste stored at any one time for soils whilst awaiting treatment and post treatment.*"
> The reason for the question:
> "*Limited information has been provided regarding the measures in place to minimise emissions when handling soils. It's not clear if waste is stored in bays or mounds. As detailed within our guidance storage areas should be clearly marked and signed. All bays or locations containing asbestos should be labelled and turnover periods for all waste stored prior and post asbestos picking activity detailed. You must also provide stockpile dimensions.*"

61. The Appellant responded:

> *"All soils with ACM are covered awaiting reception testing and soil treatment. The maximum storage amounts are included in the drawings from Question 3.*
> *Soils are received on the treatment pad and sampled into discrete lots based upon the site of origin. Whilst the moisture content of soils with ACM is rarely low and previous experience demonstrates that asbestos emissions from soils have never been measured above 0.0005f/ml, the dust suppression system is employed and soils are covered by the end of the working day with tarpaulins to ensure that soils are suitably contained prior to the formal reception analysis results being received. Once*

the results confirm that the waste acceptance criteria are achieved, then the soils will be uncovered and proceed to the soil treatment phase. The maximum quantity of soils awaiting treatment on pads 1 and 2 is 2,880t on each pad, and Pad 3 is 3,840t. ***Once the soils are treated, they no longer pose a risk to human health from asbestos emissions;*** *these soils either move to the soil storage area awaiting reuse in the restoration scheme or are placed immediately into biotreatment should elevated TPH concentrations remain present that are either hazardous or above the restoration criteria. All emissions management as part of the biotreatment works will be undertaken as described in other sections."*

62. We disagree with the statement in bold. Once the soils have been through treatment via a three-way screen, they may pose more of a risk to the environment and human health.

63. Without the detailed information requested we were unable to begin a determination of the asbestos activity or form a clear picture of how the bioremediation and asbestos activities would interact together over the working areas. We began however to consider the bioremediation activity separately allowing the Appellant time to form a response.

64. The following paragraphs detail the requests for further information sent to the operator. It is highly unusual to have so many information requests however the application was lacking so much detail and also contained inconsistencies and unusual, non-standard operating techniques that only became apparent as documents were compared. Consequently, further details were sought from the initial Schedule 5 Notice request.

65. An email[8] requesting further information was sent to the Appellant on 13 October 2021 requesting clarification on some of the Schedule 5 responses including the drainage arrangements for the non-operational areas of the site. Clarification on how bagged asbestos is deposited in skips and the location of the asbestos skips. Further clarification on the treatment pad layout and whether asbestos works are proposed to be carried out across all three treatment pads.

66. Further information was sought in relation to:
    - Question 24 on the Schedule 5 Notice regarding the location of the wood store; and
    - In relation as to whether the European Waste Catalogue Waste Codes ("EWC's") 19 05 03 and 20 03 03 are proposed for inclusion into the bioremediation process.

67. An email[9] requesting further information was sent by the Agency to the Appellant on 21 October 2021 requesting additional clarification on the disposal route and the final destination for the asbestos.

68. An email[10] requesting further information was sent by the Agency to the Appellant on the 22 October 2021 noting an inconsistency in the application documents and requiring further information from the response to Question 24 on the Schedule 5 Notice and the

[8] Appendix 6 Email from the Environment Agency to the Appellant sent on 13 October 2021
[9] Appendix 7 Email from the Environment Agency to the Appellant sent on 21 October 2021
[10] Appendix 8 Email from the Environment Agency to the Appellant sent on 22 October 2021

materials the biofilter will be constructed from. The Schedule 5 Notice response stated: "*off spec-compost EWC 19 05 03*" and the Odour Management Plan stated: "*woodchip*".

69. The Appellant responded[11] to the request for further information on 5 November 2021. The Appellant provided a revised site layout plan and Odour Management Plan. They confirmed double bagged asbestos would be manually taken out of the picking station and placed in a lockable skip.

70. Double bagged asbestos is considered to be best practice and acceptable as we do not permit asbestos cement to be dropped into skips by chutes as the asbestos pieces may break. This raises the question as to why the Appellant accepts the risks for double bagging asbestos as best practice whilst completely refuting or ignoring the Agency's questions and concerns in relation to dropping unbagged asbestos soils from loading shovels into hoppers and three-way screen may cause problems.

71. The Appellant also confirmed in their response that they required:
"*flexibility across the process to accommodate market demands"*
which may include the use of different pads for asbestos treatment. This approach was justified as they stated:
"robust, proven waste acceptance procedures implemented to ensure there is no mixing of different soil types. All drivers are given strict instructions, and clear signage coupled with supervision of the unloading of all loads by a trained operative. Once reception/soil verification testing has confirmed the suitability of the soils to be accepted at site, the soils are placed into separate soil treatment batches for biotreatment or asbestos treatment"

72. This is not acceptable. We require all installation sites to show a clear layout plan detailing the locations of all they key infrastructure and storage areas.

73. The Appellant also confirmed EWC 19 05 03 would only be used in the biofilter – a highly unusual medium with no further clarification or contexts simply that the Odour Management Plan had been updated.

74. In response to the Appellants RFI response we issued a request for further information[12] on 8 November 2021. The Appellant described EWC 19 05 03 as "oversize compost". This waste however can be highly variable odorous and unpleasant. We stated this to the Appellant also stating it may contain a lot of plastic and contraries which could affect the efficacy of the medium. BAT is to install a biofilter however we are unaware that waste materials have ever been used or permitted in this way before. We therefore questioned why the Appellant had chosen it for a filter medium.

75. The Appellant responded[13] to the email on 17 November 2021 stating where the material is produced and how it is treated. They also confirmed the Air Quality Impact Assessment

[11] Appendix 9 Email from the Appellants to the Environment Agency sent on 5 November 2021
[12] Appendix 10 Email from the Environment Agency to the Appellant sent on 8 November 2021
[13] Appendix 11 Email from the Appellants to the Environment Agency sent on 17 November 2021

submitted with the application was based on data from a biofilter with a similar medium. They also confirmed this waste is used as a filter medium at similar sites.

76. On 18 November 2021, the Agency issue a requested for further information[14] in relation to which sites had a Compost Like Output ("CLO") biofilter.

77. On 23 November 2021, the Appellant responded[15] and request a meeting with our Technical Lead Chris Hall regarding the asbestos activity.

78. On 25 November 2021, the Agency sent an email[16] to the Appellants to inform them that the application had not been fully assessed because they would not provide full details of the asbestos activities or screening operation. We also stated we had significant concerns the activities did not meet BAT. The email is copied below:

"Following on from our call the Daneshill STF application has not been fully assessed and we are not satisfied the proposed asbestos storage and picking activity meets BAT. We discussed the requirement for additional information being required for this activity regarding waste segregation and monitoring however at this stage such detail would not add any value to the application as the activity cannot be permitted as described. The comments below relate to asbestos soil storage and picking only given no information has been provided on the asbestos soil screening process.

79. *The application provides limited detail on the measures in place to minimise and contain emissions. Prior to the application being duly made we stressed the importance of the activities operating in line with the Waste Treatment BAT Conclusions 2018 and requested a resubmission in line with this. The BAT assessment submitted with the application (specifically BAT 14) however does not demonstrate that BAT is being applied. It provides a list of dust management and suppression techniques but not a means of capturing or containing hazardous asbestos fibres.*

80. *Neither the BAT assessment document nor application as a whole sufficiently recognises the potential risk airborne asbestos fibres may pose or provides measures to capture or contain asbestos fibres. A Schedule 5 notice was therefore issued and a response to each question received although further information was requested to clarify certain activities.*

81. *The concern is that the information provided doesn't provide any further evidence to demonstrate BAT can be achieved (and will be applied) at the Daneshill site. For instance Q.11 requested information on the procedure in place to explain how asbestos soils were deposited into quarantine and storage in a way that minimise dust emissions. We drew attention to our storage guidance which details areas should be marked and signed, bays and locations should be labelled, turnover periods detailed etc.*

[14] Appendix 12 Email from the Environment Agency to the Appellant sent on 18 November 2021
[15] Appendix 13 Email from the Appellants to the Environment Agency sent on 23 November 2021
[16] Appendix 14 Email from the Environment Agency to the Appellant sent on 25 November 2021

82. *The response provided some clarification, the soil reception area was highlighted on the plan with maximum stockpile sizes provided. An assurance was provided that soils would be covered until testing was completed although this does appear to be at the end of the working day. This leaves 2 x 2880 tonnes stockpiles and one 3840 tonne stockpile presumably in a heap unprotected by a building or bays."*

83. *Question 13 similarly asked for the measures in place to prevent dust and asbestos emissions when loading asbestos waste into the picking line. You confirmed there was a spray rail on the conveyer loading the station but the conveyor was not enclosed. You also confirmed the area is covered by secondary dust suppression. Historic dust monitoring for another site was referenced.*

84. *We consider shovelling, lifting, dropping through hoppers, loading through conveyors will agitate the waste and there is a risk that weathered or damaged asbestos pieces may release fibres. The mitigation measures described are akin to those expected for non-hazardous soil operations to manage nuisance dust, we do not consider they meet BAT with regards to containment of asbestos (specifically BAT 14).*

85. *The application was clear that waste would then travel through a mobile picking line with a plastic weather shield. Waste would then drop from the outlet conveyor and be formed into further stockpiles.*

86. *Question 16 required an explanation of any emissions abatement within the picking booth and if not an explanation how airborne fibres are captured and contained. We further stated:*

87. *Reason - We have significant concerns that the asbestos soil storage, transfer and treatment activities as described do not meet BAT. There appears to be no specific mitigation or abatement proposed with stockpiles described as being deposited, screened and transferred to a picking station with doors and windows, via conveyors and then further deposited in open stockpiles.*

88. *The Emissions Management Plan states "asbestos fibres are not generated on site above the detection limit so no abatement system is required". We disagree, screening and dropping from height will agitate and may break asbestos materials and lead to release of fibres. Dust suppression and "wetting solution" alone is not considered sufficient mitigation. You must demonstrate through detailed working procedures how asbestos soils are stored, treated and handled to ensure the containment and collection of diffuse emissions. As stated in BAT we would expect techniques such as:*

    Storage and treatment in enclosed buildings and/or equipment
    Maintaining enclosed equipment under adequate pressure
    Collecting and directing emissions to an adequate abatement system

89. *Your response directed us to discussions being held with the Environment Agency regarding activities on another site.*

90. *Question 14 requested the operator describe how waste would be transferred to the post treatment storage location. You answered that soil wouldn't pose a risk once validated and that normal dust suppression would be applied. We therefore conclude stockpiles would remain uncovered.*

91. *We consider the proposed activities do pose a risk of generating airborne asbestos fibres. Degraded asbestos pieces contained within the soil may pose a risk of realising fibres which will be compounded by handling and treatment. No containment measures are proposed.*

92. *No information has been provided regarding the asbestos screening activity which is stated within the application as pre-screening prior to handpicking using a three-way screener. Limited detail is provided on abatement or containment and the operator did not answer the questions within the Schedule 5, instead referencing asbestos monitoring results from Edwin Richards Quarry.*

93. *The operator must demonstrate the use of BAT for the application site and that all necessary operational controls will be in place to mitigate and capture emissions. That has not been demonstrated at Daneshill STF and for that reason we are confirming that based on the information provided to date the asbestos storage and treatment activity cannot be permitted. Therefore no further assessment around this issue would be useful at this time.*

94. *I've received your request for a meeting with myself and Chris Hall to understand how the asbestos activity can be taken forward. Please take this email as a direction on this. In order to take the asbestos activity forward 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. We can discuss a suitable timeframe. Alternatively we suggest the operator withdraws the proposals for the asbestos soil treatment activity.*

95. *I understand a meeting is to be held between the operator and their account manager Claire Roberts. I have flagged our concerns for this application with Claire and I believe this will be raised at the meeting*.

96. *In the meantime I'll await a decision as to whether the operator choses to withdraw or confirm if there is further scope to provide the information requested within a reasonable timeframe."*

97. We awaited a formal response on the above matters and continued to assess the bioremediation activity, issuing a Request for Further Information on 7 January 2022[17] from the Appellant, requesting information on the outputs for the bioremediation activity. We asked which wastes would be treated for disposal and the proposed disposal route for these wastes. We also requested clarification on which wastes treated by bioremediation would be subject to screening.

[17] Appendix 15 Email from the Environment Agency to the Appellant sent on 7 January 2022

98. The Appellant responded[18] stating waste would not be treated for disposal. We then responded by return[19] stating there were several wastes detailed for treatment which we would not consider suitable for recovery and requested information as to why the Appellant did. These are copied below.

19 02 04*	premixed waste composted of at least one hazardous waste
19 02 05*	sludges from physico/chemical treatment containing hazardous substances
19 02 11*	other wastes containing hazardous substances
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances

99. The Appellant responded[20] on 20 January 2022 removing 19 02 05* and 19 12 11* from the application and provided further clarification on the origins of the other two wastes.

100. In between times, the Agency also issued a further request for information[21] on 12 January 2022 requesting a further revised drainage plan as previous versions were still not sufficiently detailed. We stated:
"*The information regarding the treatment pads is fine however the channelling and direction of flow for the non-operational areas of the site is not shown. You have previously stated surface waters flow towards the SW lagoon which discharges from the landfills western perimeter. The discharge point from the STF and flow route into the wider site drainage must be included on a drainage plan. The STF has a point source discharge which is channelled into surface water and whilst the water should be clean the system will be subject to checks by the local EA officer. The routes must therefore be labelled on a plan.*
I note on drainage plan 3982 ….1808 there is a connection running west to east into the waste
treatment system network. Please clarify from where this arises? Is it the wheel wash?"

101. The Agency repeated this request for further information[22] by sending another email on 31 January 2022 requesting which wastes (post bioremediation) may require screening. With a follow up email the same day requesting clarification how bioremediation of EWC 20 03 03 street cleaning residues would render them suitable for use at recovery sites.

102. On 2 February 2022, the Appellant provided a response[23] to the Agency's email on 31 January 2022 by providing clarification on waste codes.

103. On 22 February 2022, the Appellants provided what the Agency would consider to be a final response[24] to our Schedule 5 request dated 6 August 2021 providing information on

[18] Appendix 16 Email from the Appellants to the Environment Agency sent on 7 January 2022
[19] Appendix 17 Email from the Environment Agency to the Appellant sent on 7 January 2022
[20] Appendix 18 Email from the Appellants to the Environment Agency sent on 20 January 2022
[21] Appendix 19 Email from the Environment Agency to the Appellant sent on 12 January 2022

[22] Appendix 20 Email from the Environment Agency to the Appellant sent on 31 January 2022.
[23] Appendix 21 Email from the Appellants to the Environment Agency sent on 2 February 2022
[24] Appendix 22 Email from the Appellants to the Environment Agency sent on 22 February 2022

the proposed screening process and mitigation measures to prevent asbestos fibre releases.

104. On 24 February 2022, the Agency sent an email[25] confirming receipt of the above and confirming we did not consider EWC 19 12 11* appropriate for use in the bioremediation activity.

105. On 27 April 2022, the Appellant wrote[26] to the Environment Agency to request a response to an email sent on 22 February 2022.

106. On 21 June 2022, the Agency sent a copy of the draft permit[27] to the Appellant for the Appellant to review.

107. On the same day, the Appellant requested[28] a discussion with the Agency Technical Leads to understand the decision-making process.

108. On 4 July 2022, the Agency informed[29] the Appellant that there would be no discussions between the Appellant and the Technical Specialist.

109. On 8 July 2022, the Appellant asked would the Agency be prepared to review the decision if the Appellant was prepared to remove the 3-way screening and to restrict the activity to handpicking only within a building.

110. On 24 August 2022, the Agency informed[30] the Appellant that we were not prepared to reopen the determination. Partial refusal for the asbestos activity still stands. We however confirmed the application should be designated as a site of High Public Interest.

111. On 2 September 2022, the Appellant wrote[31] to confirm that they had no comments on the draft permit.

112. On 21 October 2022, the Agency notified[32] the Appellant and the application was advertised on Citizen Space.

Section 6: The Appellant's grounds for appeal and the Agency's response

113. The Agency has set out below the Appellant's reasons for the appeal as stated in their appeal statement to address the Appellant's concern about the Agency's refusal of the environmental permit dated 5 June 2023 (in bold and italics for clarity) and provides a response on each.

[25] Appendix 23 Email from the Environment Agency to the Appellant sent on 24 February 2022
[26] Appendix 24 Email from the Appellant to the Environment Agency sent on 27 April 2022
[27] Appendix 26 Copy of the draft permit sent to the Appellant on 21 June 2022
[28] Appendix 27 Email from the Appellants to the Environment Agency sent on 21 June 2022
[29] Appendix 28 Email from the Environment Agency to the Appellant sent on 4 July 2022
[30] Appendix 29 Email from the Environment Agency to the Appellant sent on 24 August 2022
[31] Appendix 30 Email from the Appellants to the Environment Agency sent on 2 September 2022
[32] Appendix 31 Email from the Environment Agency to the Appellant sent on 21 October 2022

Ground One – the proposed activity complies with the requirements of BAT:

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

115. *No comment*

116. *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.*

117. There is no safe level of asbestos fibre in the environment and no safe level of human exposure. Asbestos fibres cause serious illness and death with no safe lower fibre limit for exposure. There can be no emissions of asbestos fibre into the environment. Minimising emissions "*where possible"* is not sufficient.

118. *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 operates facilities to strict internal controls so as to avoid, where at all possible, any asbestos related emissions.*

119. There is no industry best practice available for fixed asbestos soil treatment facilities. Asbestos treatment for land remediation is a temporary activity designed to clean up soils in situ. They are temporary works which cease when remediation is complete and allow for the maximum of one year operation. The proposal at Daneshill Landfill was to import contaminated asbestos soils and potentially contaminate a non-related site. The permanent activity could continue indefinitely as site based environmental permits are not time limited. As this is a long term site, control measures which would not be appropriate at a temporary site on time and cost grounds become more viable.

120. As stated above avoiding contamination *"where at all possible*" is not acceptable for asbestos waste.

121. *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.*

122. BAT means the available techniques which are the best for preventing or, where that is not practical, reducing emissions and impacts on the environment as a whole. "Techniques' within the meaning of BAT include both the technology used and the way an installation is designed, built, maintained, operated and decommissioned.

123. BAT and how it should be applied is set out in the Industrial Emissions Directive ("IED") and applies specifically to the Schedule 1 'listed' activities and Directly Associated Activities ("DAA's") which the Environment Agency sets out in the 'activities table' within installation permits.

124. The European Commission produces best available technique reference documents, referred to as ("BREFs"), including ones for different 'listed' activities. These BREFs are summarised into BAT Conclusions ("BATc") for installations. BREFs are the main reference documents used by competent authorities in Member States when issuing operational permits for installations, ensuring similar techniques and standards are applied to similar activities across Europe. Some BATc are generic in application and others apply to specific activities.

125. In this instance the relevant BAT techniques are referenced in the Waste Treatment BAT conclusions 2018 as detailed above. These however do not specifically reference asbestos activities therefore we looked for the nearest reference within the document to ensure protection of the environment.

126. The screening process proposed by the operator was akin to an operation undertaken on a non-hazardous aggregates site where mitigation measures are required to prevent nuisance dust. At a permanent site where asbestos waste could be imported year after year we consider BAT to be measures that enclose diffuse emissions sources and capture all potential emissions.

127. BAT is a dynamic concept and so the review of what constitutes BAT is a continuing process. For example new measures and techniques may emerge and technologies are constantly developing and new or emerging processes are being introduced into industries. We would not accept evidence of diffuse emissions at one site evidence the requirement to reduce BAT and emissions controls at another site. We would expect innovation to ensure safer standards not reduce them.

128. *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.*

129. *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.*

130. We do not accept monitoring data from other sites as evidence that there will not be diffuse emissions at an unrelated site. Each operation is assessed on its own merits and each site must have appropriate mitigation measures in place to capture and potential emissions. On this basis the monitoring data presented within the permit application was not considered.

131. In addition, it has been noted during our discussions for the Appeal that the data previously presented during the permit determination was gathered from unpermitted operations at site. It is understood that the operator brought to site an unpermitted three way screen in direct contravention of their permit. This data would also therefore be inadmissible as we have no way of verifying the results. In addition it raises significant

concerns that the operator would directly contravene the conditions of an issued permit and their assurances that mitigation would not be required.

132. Considering the illegal operation we therefore have serious concerns the Appellant will not operate the site to Appropriate Measures.

133. *The EA has not published and 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 Appellants expert evidence will address each of the EA' assertions in the DN in turn and demonstrate that the Proposed Activity complies with BAT.*

134. *The Appellant will contend that the EA has failed to have proper regard to the need to prevent or reduce to a minimum the <u>overall impact</u> of any emissions on the environment and the risks to it.*

135. *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.*

136. *The EA accepted that nuisance dust emissions from the bioremediation activities can be controlled by the measures proposed by the Appellant. The EA however retained the fugitive emissions condition requiring the operator to submit an Emissions Management Plan (DEMP) should emissions be detected rather than tying the Appellants DEMP into the Operating Techniques of the permit. This is because the document was considered a satisfactory general outline considering the Appropriate Measures required to contain nuisance emissions of dust. It was considered appropriate to allow the development of the site in terms of layout and operations to be established to consider the if the appropriate measures were being followed with regards to nuisance dust from the bioremediation activities.*

137. Our Technical Guidance Note M17 monitoring of particulate matter in ambient air around waste facilities provides information on the relative particle sizes and properties of dust. Pages 6 to 8 of this guidance provides is particularly relevant. The standard definition of dust is particulate matter ranging in size from 1-75 µm in diameter (particles greater than 75 µm are termed grit). Dust will be generated from an emission source and released to air, for example dropping from height. Once the dust is in the air it is termed suspended dust and will spread from the source and carried on the wind. Dust released from a non-elevated source close to the ground will decrease with distance due to dispersion and dilution.

138. As a "parcel" of dust particles is carried from the sources some particles settle out (dustfall). Larger particles settle out almost immediately and close to the source, often within the site boundary however finer particles carry considerable distance. For particles

to have an impact they must reach a receptor – people, their properties, materials, flora, fauna, soils and water. The particle size has a very great effect on the physical behaviour of the dust and its impacts. For example particles with a diameter >50 μm tend to be deposited quickly, <10 μm have an extremely small deposit rate in comparison. Suspended particles up to 10 μm are known as PM_{μ} and can be breathed in by people. Simplified the dust fraction greater than 10 μm deposits out of the air within a few hundred meters to a kilometre of source. Those particles suspended in the atmosphere for any significant length of time and distance comprise the PM_{10} fraction. PM_{10} particles are small enough to be breathed in and impact health.

139. Put simply, dust falling from biopiles or other earth moving operations is unpleasant and must be controlled however given its size and weight is unlikely to travel significant distances. It cannot generally be inhaled deep into the respiratory system. Fundamentally it is an unpleasant annoyance and a significant consideration when assessing permit applications. It however is not a risk to life in the same manner as asbestos.

140. When considering the asbestos activities we did not consider the Appellants DEMP. We considered that there should be no dust arising from the activities. That any emissions of dust and potentially asbestos fibres entrained within the dust or invisible to the eye should be completely captured and contained. Asbestos fibres are far lighter than dust particles. It is this nature that allows them to travel within the respiratory track unlike dust particles. Asbestos fibres may be carried significant distances. Standard measures such as tarpaulin sheeting or dampening with water may not prevent their release. Should they be temporarily halted, once dry or uncovered they may become airborne again.

141. Nuisance dust is a visible and containable fugitive release with proven methods of containment. There is no safe level of asbestos fibre, no easy means of detection in an external environment and no safe level in the environment.

142. *The Appellant reserves the right to respond to any new technical evidence which the EA seeks to submit through the Appeal process.*

143. The Agency reserves the right to respond to any new evidence which the Appellant seeks to submit through the Appeal process.

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

(a) BAT14

144. *The EA had adopted an erroneous interpretation of BAT14 which places undue reliance on selective parts of BAT14d.*

145. *Although not expressly stated in the DN, when considering as a whole, the EAs 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 BAT 14.*

146. *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.*

147. *The Appellant will content 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.*

148. *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 dust. BAT is to use an appropriate combination of the techniques give below"*

149. *8 separate techniques (a to h) are then set out within the BAT Conclusion as forming part of BAT14.*

150. *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.*

151. *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.*

152. BAT 14 is clear that we must prevent diffuse emissions to air unless it is not practicable to do so. A practicable option is one that is exists, can be put into practice. Enclosing the screener (for example in a building or other structure) to prevent diffuse emissions is a practicable option in this case, especially given the long-term nature of the site. Once enclosed it is then possible collect and abate the diffuse emissions.

153. *The Appellants 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.*

154. *BAT14a – the Application proposes limiting the drop height of asbestos contaminated soils at the stages from initial acceptance onwards (as set out in the BAT14 Document)*

155. *Limiting drop height is an acceptable measure. However, prior to dropping the asbestos waste it would have been picked by loading shovels, channelled through hoppers and three way screen and ejected from conveyers. It is the total movement and screening of the activities leading to potentially breakup of asbestos pieces and then further movement with shovel and conveyers which we consider may lead to fibre release.*

156. *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 conveyer belts (in accordance with the manufactures safety guidance for the equipment) with abetment via HEPA filter and the containment of the picking station with abatement vis HEPA filter.*

157. As above, the soils will be moved in and out of the bays by loading shovel, agitated and exposed to wind whip. Temporary sheeting may be useful in preventing nuisance dust in windy conditions but may become contaminated with fibres and is not a permanent solution to continued external storage of soils and asbestos waste.

158. Partial containment of the screener is not full containment. As detailed above agitated and broken asbestos pieces will be separated off and ejected into external stockpiles as will potentially fibre contaminated soils.

159. *BAT14e – the Application proposes that the waste will be dampened throughout all stages of the waste being handled at the site.*

160. A dust containment measure required at all sites to contain nuisance dust which falls to the ground relatively easily. Its effectiveness at an asbestos facility for complete control of fibre emissions is unknown. Fibres are light and once dry will become airborne once again. Sweeping and collection of dust on the ground will also lead to any asbestos fibres within the dust becoming airborne again.

161. *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.*

    As discussed above we must prevent diffuse emissions to air unless it is not practicable to do so. We consider practicable measures are measures that can be done; can be put into practice, with available means. An enclosure and abatement is practicable in this case. The Appellant offered the option of partial enclosure – we consider it would not be significantly more effort to fully enclose the screening operation. Reasonableness does not form part of the definition of practicable. The applicability of BAT14d is qualified by restrictions where *"The use of enclosed equipment or buildings may be restricted by safety considerations such as the risk of explosion or oxygen depletion."* and *"The use of enclosed equipment or buildings may also be constrained by the volume of waste."* The Appellant did not provide any justification based on these criteria.

162. *The Appellant will contend that the EA has failed entirely to explain (and support and such explanation with objective technical evidence) why it considers that the combination of measures proposed by the Appellant is not "appropriate" within the meaning BAT14.*

163. *The Appellant will demonstrate that it has investigated the availability of equipment specifically designed for treatment of asbestos contaminated soils. The Appellant will*

demonstrate that the EA has approved for use, in comparable circumstances, identical equipment as such 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.

164. Throughout the determination the Appellant referenced asbestos activities being undertaken under mobile plant deployment and the Nicole Report also references operations under mobile plant deployment.

165. Works undertaken under mobile plant deployment are authorised under separate legislation and are intended for temporary works to remediate areas of contaminated land at the site of contamination. Rarely do they involve the transportation and movement of contaminated soils from the site (unless under strict hub and cluster arrangements).

166. Areas of contamination and soil contaminants are known through detailed site investigations and the characteristics and treatment requirements of the waste carefully planned. Soils are excavated, treated and reused on the same site.

167. The works are authorised for a maximum of one year and are usually completed sooner limiting the potential for long term impacts.

168. We do not consider the short term remediation of a contaminated site in any way carries the same risk profile or justifies the same level of emissions control as a permanent soil treatment facility authorised to import soils from multiple sites year after year.

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

(b)BAT14d

170. *BAT14 states that "Depending on the risk posed by the waste" in terms of diffuse emissions to air, BAT14d is especially relevant. The level of risk which triggers the "especial relevance" of BST14d is not prescribed in BAT14. The Appellant will contend that the EA has failed to properly understand and apply this aspect of BAT14 and BAT14 d, in the context of the risks posed by the waste which will be recovered by the Proposed Activity.*

171. *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 (eg conveyer belts) - maintaining the enclosed equipment or building under adequate pressure – collecting and directing the emissions to an appropriate abatement system.*

172. *Even where BAT14d is "especially relevant" it does not require that all of the techniques described must be utilized 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.

173. *BAT14 directs both operators and regulators to carefully consider the relevance of BAT14d, in certain circumstances and does not prescribe the use of BAT 14d in every case. To take such an approach would be to divorce the application BAT from the proper understanding of the facts relating to a specific proposal, in direct contradiction to its meaning and purpose.*

174. *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 streams which is being assessed.*

175. We assess all permit applications on a case by case basis. The case being here that the Appellant applied to import asbestos impacted soils, screen them using a three way screener to separate out the asbestos fragments and eject the asbestos and soils into open stockpiles prior to further movement, agitation and processing in an open environment with dust management measures akin to those appropriate to a non-hazardous aggregate facility. We did not consider this appropriate or in compliance with BAT requirements for the reasons detailed above.

176. To reiterate:
    - There is "no safe level" of asbestos
    - There is no evidence provided by FCC that asbestos fibres aren't produced
    - Practicable measures to prevent pollution must be applied

177. The Appellants justification for these minimal mitigation measures was monitoring data obtained from an unrelated sites where illegal screening operations had been undertaken. The Appellant at no point addressed our concerns that the handling and screening may break the asbestos. They simply pointed to this uncorroborated monitoring data. They now state applications should be assessment on a "case by case" basis whilst rejecting our assessment when we do so.

178. If the Appellant recognises the risk that picked asbestos from the conveyer belt requires careful handling, double bagging and placing (not dropping) in asbestos skips, why do they completely disregard these risks during a highly energetic screening process which ejects the waste into open stockpiles, without bagging. The Appellant did not provide any detail how these wastes would be moved after the process. In the absence of information we presume this would be by loading shovel.

179. *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 Conclusions 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 enclosed of conveyers as forming part of BAT in respect of dust emissions.

180. *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.*

181. *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.*

182. *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.*

183. The Agency considers there is an extreme degree of risk and no safe level of asbestos.

184. *Havin 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 Appellants 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.*

185. The Appellant must risk assess the activity. The Agency assesses the application. The Agency considered their application and risk assessments poor.

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

186. *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.*

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

All appropriate preventative measures are taken against pollution.
No significant pollution is caused.

In accordance with Directive 2008/98/EC, the asbestos contaminated soils will be recovered for re-use
Necessary measures are taken to prevent accidents and limit their consequences.

188. The Appellant has not listed the full text of Article 11. Member States shall take 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;
(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.

Fundamentally, we do not consider the best available techniques or appropriate measures have been applied and without this the risks of significant pollution and potential harm are high.

189. *The Appellant will adduce technical data to demonstrate by way of expert evidence that the proposed Activity will not result in significant pollution.*

190. *The Appellants 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.*

191. *The Appellant will emphasis 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 conclusions 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.*

192. *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 Appellants's expert evidence will demonstrate that the proposed Activity result in 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.

193. *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 release of asbestos fibre from the Proposed Activity.*

194. *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 ensure 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.*

195. *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 stationery installation. The apparent distinction relied upon by the EA (in so far as it is possible to currently understand the case) that BAT does not apply to mobile installation flies in the face of the EA's statutory obligations pursuant to the Environment Act 1996.*

196. The risk profiles of temporary remediation undertaken by mobile treatment plant and treatment undertaken at a fixed treatment installation are entirely different. Mobile plant deployments are limited to a maximum of 12 months (often shorter). They also remediate existing contaminated soils in situ at the point of contamination. They do not involve the transportation and import of contaminated materials to site. The short duration of the deployment minimises the level of risk and therefore the level of control measures that are applied (for example it would not be feasible to erect a building to contain a process which may be over in a matter of a few weeks).

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

198. *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.*

Section 5: Conclusion

199. The Agency has major concerns, namely:
    - The Appellant's compliance history,
      And
    - Environmental impact.

200. The Appellants' arguments are almost entirely based on monitoring data adduced from illegal operations on another site which is completely enclosed. The activities proposed at Daneshill operate almost entirely in the absence of containment. Elements of the process are enclosed however we consider the treatment activity may give rise to pollution. Given the nature of the potential emissions there is no reliable means of evidencing such contamination. Activities almost entirely rely on the operators management techniques. As has evidenced in the past they are willing to contravene permit conditions and given the nature of the potential emissions there is almost no assurance that activities of this nature should be undertaken outside, without appropriate containment and the means to assess any potential emissions arising.

201. In addition there are practicable options available to contain potential emissions. Emissions that could ultimately endanger lives and contaminate the environment. The Appellant chooses not to use them.

202. For reasons best known to the Appellant, the Appellant failed to provide an adequate response to the Agency's Request for Further Information on a Notice issued on 6 August 2021 under Schedule 5 of the EPR 2016 and to any of the Agency's emails. Towards the end of the determination period, the Appellant provided some information towards answering the Agency's questions however it was too little too late. If the Appellant is minded to-engage with the Agency by providing all the outstanding information, then we would look forward to receiving a new application to vary the permit.

203. The Agency has explained in this statement and the refusal Decision Document why the permit was refused. It is our opinion that there is nothing submitted in the appeal documentation that alters this conclusion and we consider the appeal should be dismissed.

Section 6: List of Appendices

Appendix 1	Request for Further Information Notice issued on 6 August 20121 under Schedule 5 of the EPR 2016
Appendix 2	Email from the Appellant's environmental consultant to the Environment Agency sent 13 September 2021
Appendix 3	Copy of the permit for the Edwin Richards Quarry site.
Appendix 4	Email from the Environment Agency to the Appellant's consultant sent 13 September 2021
Appendix 5	The Appellant's response to the Notice issued on 6 August 2021 under Schedule 5 of the EPR 2016
Appendix 6	Email from the Environment Agency to the Appellant sent on 13 October 2021
Appendix 7	Email from the Environment Agency to the Appellant sent on 21 October 2021
Appendix 8	Email from the Environment Agency to the Appellant sent on 22 October 2021
Appendix 9	Email from the Appellants to the Environment Agency sent on 5 November 2021
Appendix 10	Email from the Environment Agency to the Appellant sent on 8 November 2021
Appendix 11	Email from the Appellants to the Environment Agency sent on 17 November 2021
Appendix 12	Email from the Environment Agency to the Appellant sent on 18 November 2021
Appendix 13	Email from the Appellants to the Environment Agency sent on 23 November 2021
Appendix 14	Email from the Environment Agency to the Appellant sent on 25 November 2021
Appendix 15	Email from the Environment Agency to the Appellant sent on 7 January 2022
Appendix 16	Email from the Appellants to the Environment Agency sent on 7 January 2022
Appendix 17	Email from the Environment Agency to the Appellant sent on 7 January 2022
Appendix 18	Email from the Appellants to the Environment Agency sent on 20 January 2022
Appendix 19	Email from the Environment Agency to the Appellant sent on 12 January 2022

Appendix 20	Email from the Environment Agency to the Appellant sent on 31 January 2022.
Appendix 21	Email from the Appellants to the Environment Agency sent on 2 February 2022
Appendix 22	Email from the Appellants to the Environment Agency sent on the 22 February 2022
Appendix 23	Email from the Environment Agency to the Appellant sent on 24 February 2022
Appendix 24	Email from the Appellant to the Environment Agency sent on 27 April 2022
Appendix 25	Email from the Environment Agency to the Appellant sent on 5 May 2022
Appendix 26	Copy of the draft permit sent to the Appellant on 21 June 2022
Appendix 27	Email from the Appellants to the Environment Agency sent on 21 June 2022
Appendix 28	Email from the Environment Agency to the Appellant sent on 4 July 2022
Appendix 29	Email from the Environment Agency to the Appellant sent on 24 August 2022