APP/EPR/652

APPEAL BY 3C WASTE LIMITED

ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2016 MAW GREEN LANDFILL SITE, MAW GREEN ROAD, COPPENHALL, CREWE, CHESHIRE, CW1 5NG

ENVIRONMENT AGENCY RESPONSE TO APPELLANT'S STATEMENT DATE: 23 JANUARY 2024

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Section 1: Introduction

- 1. This is the Environment Agency's ("the Agency") statement in response to an appeal by 3C Waste Limited, company number: 02632581, ("the Appellant"). The appeal is made under the provisions of Regulation 31 of the Environmental Permitting (England and Wales) Regulations 2016 ("EPR 2016").
- The Appellant is appealing the conditions imposed by the Agency Initiated Variation ("AIV") reference EPR/BS7722ID/V010 of the Environmental Permit ("EP") issued 5 October 2023 ("the October 2023 EP") for Maw Green Landfill Site, Maw Green Road, Coppenhall, Crewe, Cheshire, CW1 5NG ("the Site") relating to the operation of the Soil Treatment Facility ("STF").
- 3. This appeal is also linked to an appeal of the Agency's decision dated 9 December 2022, to partially refuse application reference EPR/NP3538MF/V009, for a permit variation to accept and treat soils containing asbestos at another site (Daneshill Landfill, Daneshill Road, Retford, Nottinghamshire DN22 8RB), ("the Daneshill EP") and a subsequent AIV reference EPR/NP3538MF/V010 to impose conditions on the operation of the Daneshill STF relating to treatment of asbestos. The reasons for the partial refusal are set out in the Agency's Statement of Case ("SoC") and the associated documents provided under that appeal (reference APP/EPR/636) ("the Extant Appeal"). The reasons for the AIVs for Daneshill and Maw Green are similar and the appeals are being cojoined as the refusal and variations raise similar issues.
- 4. The October 2023 EP permitted the Appellant to accept and treat soils containing asbestos waste at the STF, subject to conditions. The treatment of asbestos containing contaminated soils is permitted using a three-way mechanical screener. 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 and then within locked skips, prior to disposal.

- 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.
- 6. The October 2023 EP conditions required that the mechanical screening activity was undertaken in an enclosed and abated manner in line with best available techniques ("BAT") for Waste Treatment.

Section 2: The legal framework

- 7. As an installation the site is subject to the requirements of the Environmental Permitting (England and Wales) Regulations 2016 ("EPR 2016").
- 8. 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.
- 9. 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"

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

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

11. 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.

12. 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."

13. 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."

14. 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."

15. 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;"
- 16. BAT for treatment and transfer of chemical wastes in England is set out in technical guidance Chemical Waste: appropriate measures for permitted facilities (published 18 November 2020) (the "Appropriate Measures"). The Appropriate Measures is the guidance that covers the treatment of soils containing hazardous chemicals. The Agency supplements the appropriate measures for soil treatment using an internally available document called "Hazardous Waste Soil Treatment."
- 17. The Appropriate Measures and Hazardous Waste Soil Treatment are based on the overarching requirements of the BAT Conclusions for waste treatment ("BATCs") issued 10 August 2018 (EU 2018/1147). The BATCs are based on evidence from the Best Available Techniques (BAT) Reference Document for Waste Treatment ("WT BREF") published in 2018 by the European Commission.

Section 3: Reason for variation of the conditions

- 18. The Agency has already stated in the Extant Appeal that variation EPR/BS7722ID/V009, which allowed operation of the STF was issued in error without the necessary controls on the asbestos treatment process to prevent and minimise emissions.
- 19. Permit variation application EPR/BS7722ID/V010 was initiated by the Agency to apply the necessary control measures on the STF.
- 20. The Agency considers that the storage, handling and treatment of asbestos wastes in the manner proposed increases the risk of asbestos fibres being released into the environment, either into the air or into the soil matrix. The Agency considered that it could be possible to vary the current permit to permit the asbestos treatment process to be undertaken in a controlled manner, subject to stringent conditions.
- 21. Permit number EPR/HP3632RP/V003 (Edwin Richards Quarry Soil Treatment Centre, "ERQ") was issued Waste Recycling Group (Central) Limited (Company No. 04000033), on 02/06/2021. This existing permit includes conditions requiring the operator to implement standards expected for the sector which meet the requirements of our guidance for minimising the risk of airborne fibres.
- 22. The Agency therefore varied their permit ref EPR/BS7722ID/V009 to include similar conditions to those previously issued in permit EPR/HP3632RP/V003 for ERQ that were not appealed by the Appellant.
- 23. The Appellant is currently in process of discharging pre-operational conditions to allow full operation of a mechanical screening of soil containing asbestos operation through permit variation application for ERQ reference EPR/HP3632RP/V005.
- 24. Activity AR7 in table S1.1 of the October 2023 EP permits the operation of the asbestos treatment processes as an activity at the STF.
- 25. AR7 applies the following limitations on the activity permitted:
 - Screening and handpicking shall take place in a building on an impermeable surface with a sealed drainage system.
- 26. This measure is to ensure diffuse emissions to the environment from the asbestos treatment process are minimised. Where there is a "risk posed" by the waste of diffuse emissions, relevant aspects of BAT 14 are implemented to prevent or, where that is not practicable, to reduce diffuse emissions, including containment, collection and treatment of emissions.
- 27. A "building" is a covered structure enclosed on all vertical sides that provides sheltered cover and contains emissions of, for example, noise, particulate matter, odour and litter. A building would prevent the asbestos wastes being exposed to the elements, and prevent the accumulation of contaminated run-off which has to be further considered (see below).

- 28. An "impermeable surface" means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface. An impermeable surface (such as a solid concrete surface) is considered necessary to allow proper control of asbestos releases.
- 29. The Agency considers an impermeable surface with sealed drainage is an established standard for asbestos waste sites. This is consistent with existing Agency appropriate measures guidance for waste sites which accept asbestos. Dedicated asbestos transfer stations and transfer stations that accept asbestos, under Agency standard rules permits, require that:

"Asbestos waste shall be double bagged or securely wrapped and kept within clearly identified, segregated, secure, lockable containers on an impermeable surface with sealed drainage system."

Note that this requirement is for all asbestos wastes, including cement bonded asbestos which the Appellant wants to treat.

- 30. The ERQ permit and other installation permits for storage and treatment of asbestos wastes also require an impermeable surface with sealed drainage system. These include: Finningley Quarry Waste Facility operated by Tetron Finningley LLP permit ref: EPR/NB3039RM/V003 ("Tetron"); Mohawk Wharf Recycling Facility operated by Keltbray AWS Limited permit ref: EPR/FP3092LH/V005 ("Keltbray"); and Thermal Recycling (UK) Limited permit ref: EPR/BP3136WY/A001 ("Thermal"). The Thermal permit does not explicitly mention an impermeable surface with sealed drainage system, but the site is inside an industrial unit, and this is described in the operator's techniques. This permit was issued in 2017 predating both the BATCs and Chemical waste: appropriate measures documents and, if permitted today, would have that restriction put into table \$1.1.
- 31. "Sealed drainage" in relation to an impermeable surface means a drainage system with impermeable components which does not leak and which will ensure that:
 - no liquid will run off the surface otherwise than via the system;
 - except where they may be lawfully discharged, all liquids entering the system are collected in a sealed sump.
- 32. Undercover storage and treatment will minimise issues with rainfall-derived contaminated drainage.

33.

• The screener shall be enclosed.

As set out in our SoC for in the Extant Appeal a key requirement to prevent pollution from material which presents an environmental risk is to enclose the mechanical screener to ensure any diffuse fibre or dust emissions generated by the process are, in line with BAT 14, (and in particular BAT 14d), contained and then discharged to the environment via appropriate abatement equipment (in this case a high-efficiency particulate air ("HEPA") filter or equivalent), to ensure emissions are minimised.

34.

Handpicking shall take place in a dedicated enclosed picking line.

This limitation is in line with the Appellant's proposal for how their picking line is intended to operate, which is an enclosed picking line (in accordance with current industry practice).

35.

• No more than 100 tonnes per day of soils impacted with identifiable pieces of bonded asbestos shall be treated (in aggregate).

The Agency's approach to permitting waste activities is to limit treatment capacity via a daily tonnage limit to indicate level of risk that has been assessed in an application and identify any further increases in processing rate which would lead to the environmental risk needing to be reassessed. Further, the Agency considers that an installation permit for waste treatment under Schedule 1, Section 5.3 of the EPR 2016 should have a daily treatment capacity limit so that it is clear when any proposed change to the activity should be considered against the "substantial change" criteria set out Schedule 5, paragraph 5(5)) of the EPR 2016, and which includes "any change in operation which in itself meets the thresholds, if any, set out in Schedule 1, Part 2...". Schedule 1, Part 2, Section 5.3 activities have a threshold set at "a capacity exceeding 10 tonnes per day...". The limits are discussed further in Section 4 below.

36.

• The screening and handpicking of asbestos impacted wastes shall not increase the asbestos fibre load in the waste.

This is required to ensure that asbestos contamination is not additionally created or spread via the treatment process. Asbestos is a carcinogenic and toxic substance. Asbestos fibres within degraded and damaged asbestos cement fragments are friable, and its mechanical 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. The free fibre and small asbestos fragment load of the soils may also be increased – this is further explained in Section 4 below.

37.

 Storage of screened waste not impacted with asbestos shall be stored outside in bays or in a building.

This is to allow storage of the treated fractions outside. Once visually inspected and tested to ensure levels of asbestos are below the hazardous threshold, there is no requirement to keep these soils within the building (though it may be convenient to do so). Arrangements for the external storage of non-hazardous waste soils prior to reuse are not subject to the appeal.

38.

 Screened soil impacted with asbestos shall be stored inside a building in a way that minimises asbestos fibre emissions such as spraying and sheeting.

This is to ensure that the asbestos-containing fractions are stored in a manner which will minimise the risk of emissions whilst they are awaiting further treatment or awaiting assessment for asbestos contamination.

39.

 Separated bonded asbestos fragments shall be bagged whilst handpicking is in progress. Once handpicked asbestos shall be stored double bagged in sealed, closed and locked containers.

This is to ensure that the picked, separated asbestos fragments are stored in a manner which will minimise the risk of emissions whilst they are awaiting removal off-site for disposal. The Appellant's operating techniques for the asbestos picking activity included measures such as double bagging and placing the bagged pieces in lockable asbestos skips by hand, which the Agency considers appropriate.

40.

• Treated waste shall be stored for no longer than 6 months prior to transfer off-site or to the landfill as cover.

This limitation is to comply with the Chemical waste: appropriate measures, which limits storage to six months for most hazardous wastes (some may be restricted further subject to type (for example highly biodegradable waste), but six months is considered appropriate in this case). The six-month period limitation has been an Agency requirement both under the Appropriate Measures and under the previous applicable waste guidance (Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste, first published in 2004). The use of 'cover' as a term is discussed in Section 4 below.

41.

- No more than 10 tonnes of picked asbestos shall be stored on site.
- No more than 1000 tonnes of treated soils shall be stored on site.

These limit the amount of treated waste held at the STF. The limits are discussed further in Section 4 below.

42.

Non-hazardous treated soils shall be kept separate from hazardous soils.

Deliberate mixing of hazardous and non-hazardous wastes is not permitted by the Hazardous Waste (England and Wales) Regulations 2005 (as amended) unless specifically authorised by a permit. This is included to ensure mixing is not authorised by the permit. Mixing of any quantity of hazardous waste with non-hazardous waste renders the entire amount hazardous, even below applicable hazard thresholds.

43.

Waste types (soil wastes only) and quantities as specified in schedule 2, table S2.4.

This specifies the waste types (by European Waste Catalogue ("EWC") Code) suitable for the asbestos treatment process at the STF, as listed in table S2.4 of the varied permit, with limitations on asbestos fibre contamination. These are limited to soil and stones containing low concentrations of asbestos fibres (specifically asbestos in unbound fibrous form (free chrysotile fibrous asbestos in the soil must be <0.1% w/w. Other forms or mixed forms of fibrous asbestos in the soil must be <0.01% w/w), but with identifiable pieces of bonded asbestos (any particle of a size that can be identified as potentially being asbestos by a competent person, if examined by the naked eye). These limits have been applied at other sites for handpicking of asbestos. There is no limit on the amount of visible bonded asbestos fragments present in the soil wastes.

- 44. Activity AR6 in table S1.1 of the October 2023 EP permits the storage of hazardous waste prior to on-site treatment for the purpose of recovery. This activity has been varied to add storage of asbestos contaminated wastes prior to treatment on site by reference to table S2.4, and includes the same requirements as AR7 for the storage of waste containing asbestos.
- 45. In addition to the restrictions in AR6 and AR7, the Agency has also imposed Preoperational Condition 4 in table S1.4 and Improvement Condition 5 in table S1.3 relating to the asbestos treatment process.
- 46. Pre-operational Condition 4 requires the Appellant, prior to the operation of the mechanical screener, to provide information, for approval, to the Agency demonstrating that:
 - the screener is fully enclosed and all dust emissions from the screening operation are directed to an active abatement system with a HEPA filter or other suitable design;
 - the necessary procedures for commissioning, operation, maintenance, monitoring checks, audits and emergency procedures for the mechanical screener and abatement system to be implemented on site are in place.

This is to ensure the requirements of BAT relating to operation of the screening process are in place prior to the commencement of operation of the screening process, so that the risks posed are minimised and that no significant pollution is caused.

- 47. Improvement Condition 5 requires that the Appellant, within six months of commissioning of the asbestos screening process, to report on the sampling and monitoring of the of the incoming waste and the separated wastes streams, from the operation of the asbestos screening process over the first 4 months of operation.
- 48. The aim of the condition is twofold:
 - to ensure, to a high level of confidence, that the monitoring methods used to assess the treatment process output streams are suitable; and

• that the monitoring undertaken on the screened outputs is showing that the outputs are not creating additional fibre contamination in the screened outputs.

The wording used for the first aim is adapted and developed from a permit condition applied to the Thermal permit for asbestos treatment, and was further developed for the Tetron permit where the process also creates separate waste output streams.

- 49. The Agency considers this condition is fundamental to demonstrating that the Article 11 requirements set out above are achievable. To be considered BAT, the treatment process must achieve its aim, in this case suitable segregation of the visible bonded asbestos fragments into the hand-pickable middle fraction so that it can be hand-picked for disposal, without creating significant pollution of the other fractions, that cannot be treated any further. Should the results show significant levels of asbestos in any of the streams then the Appellant will need to reconsider the types of waste accepted and the waste acceptance criteria for the process.
- 50. The Agency has included the Appellant's operating techniques within table S1.2, by reference to the original application documentation and the response to Schedule 5 Notices and other requests for information. The Agency has excluded all references to a mechanical screen that is not enclosed as we consider based on current information provided that operating in an enclosed and abated manner as set out in the varied permit is a precautionary approach based on BAT that will prevent and minimise asbestos releases to the environment.
- 51. Monitoring requirements have been added for the channelled emission to air from the abatement system on the asbestos screener emission point in table S3.2 (details of which are to be confirmed via Pre-operational Condition 4). These are:
 - For asbestos fibres a limit of 0.1 fibres/ml (or "f/ml")
 - For particulate matter (dust) a limit of 5 mg/m³
- 52. The particulate matter (dust) limit is a BAT-associated emission level ("BAT-AEL") applicable for channelled emissions of dust to air from physico-chemical treatment of solid and/or pasty waste (Section 4.1 of the BATCs, table 6.8). A channelled emission is defined in the BATCs as:

"Emissions of pollutants into the environment through any kind of duct, pipe, stack, etc. This also includes emissions from open-top biofilters".

The emission limit value for asbestos fibres is an Agency requirement – there is no applicable BAT-AEL for asbestos. The Agency has set a limit of 0.1 fibres/ml, which is in accordance with the Control of Asbestos Regulations 2012 ("CAR"). The limit is the control limit set in CAR and is therefore considered an achievable limit. In CAR the control limit is not a 'safe' level and exposure must be reduced to as far ablow the control limit as possible. The EU Directive 2009/148/EC on protection of workers from the risks related to exposure to asbestos at work also referenced the 0.1 fibres/ml limit. It is worth noting however, that this Directive was amended on 22 November 2023 under (EU)2023/2668 to set more stringent limits of 0.01 fibres/ml (and 0.002 fibres/ml 3 years later) for

implementation in member states by 20 December 2025 to reflect the increased concerns over health risks associated with asbestos exposure).

- 53. Ambient Air Monitoring requirements have been added for asbestos fibres around the site in table S3.14. This is a standard condition which the Agency has used for many years around landfill sites that dispose of asbestos and also sites that treat asbestos. The locations are to be confirmed through Pre-operational Condition 4. The monitoring standard is in accordance with the Agency's Technical Guidance Note M17 Monitoring of particulate matter in ambient air around waste facilities ("M17").
- 54. There are other conditions which the Appellant has not raised in the appeal. The Agency reserves the right to respond to those conditions should the Appellant raise those conditions at the Inquiry.
- 55. The Agency has also considered compliance with Schedule 16 of EPR 2016 regarding Asbestos, which applies to every regulated facility. Schedule 16, sets out the requirements of regulated facilities with regards to the Asbestos Directive (87/217/EEC) as Amended by the Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019. The Agency must ensure the following provisions of the Directive are met namely: Article 3; Article 4(1); Article 5; Article 6(1) and 6(2); and Article 8. Article 5 is not applicable in this case as it relates to effluent from asbestos manufacture.

56. Article 3 states:

Member States shall take the measures necessary to ensure that asbestos emissions into the air, asbestos discharges into the aquatic environment, and solid asbestos waste are, as far as reasonably practicable, reduced at source and prevented. In the case of the use of asbestos, these measures should entail using the best available technology not entailing excessive cost, including where appropriate recycling or treatment.

The Agency considers that the October 2023 EP as described above is BAT for the facility and this requirement is met.

57. Article 4 States:

Without prejudice to Article 3, Member States shall take the measures necessary to ensure that the concentration of asbestos emitted through the discharge ducts into the air during use of asbestos does not exceed a limit value of 0.1 mg/m³ (milligrams of asbestos per m³ of air discharged).

For the purposes of the limit, the asbestos directive annex states that:

Where fibre counting procedures are used for the purpose of checking compliance with the limit value in Article 4 of the Directive, subject to the provisions of Article 6 (3) of the Directive, a conversion factor of two fibres/ml to 0.1 mg/m³ of asbestos dust may be used.

The emission limit value set at the emission point for the enclosed asbestos screener emission point in the October 2023 EP (using a fibre count method) is 0.1 f/ml (0.005

mg/m³ using the conversion factor stated above), which is within the 2 f/ml (0.1 mg/m³) limit set by Article 4 and the Agency considers that this requirement is met.

58. Article 6 States:

- (1) Member States shall take the measures necessary to ensure that measurements are taken at regular intervals of emissions into the air and of discharges of aqueous effluent from facilities to which the limit values provided for in Articles 4 and 5 apply.
- (2) For the purposes of checking compliance with the said limit values the sampling and analysis procedures and methods shall be in conformity with those described in the Annex or with any other procedure or method which gives equivalent results.

The monitoring requirements for the enclosed asbestos screener emission point in the October 2023 EP are in accordance with the requirements.

59. Article 8 states:

Member States shall take the measures necessary to ensure that:

- in the course of the transport and deposition of waste containing asbestos fibres or dust, no such fibres or dust are released into the air and no liquids which may contain asbestos fibres are spilled,
- where waste containing asbestos fibres or dust is landfilled at sites licensed for the purpose, such waste is so treated, packaged or covered, with account being taken of local conditions, that the release of asbestos particles into the environment is prevented.

The Agency considers that the October 2023 EP as described above is BAT for the facility and meets the first of these requirements (the second is not applicable as it relates to landfilling, which is not proposed by the Appellant).

Conclusions to reasons for variation

- 60. As stated above, and in the Extant Appeal, the Agency considers that the storage, handling and treatment of asbestos wastes as proposed by the Appellant poses a risk of airborne fibres being released into the environment, either into the air or into the soil matrix. Any treatment of asbestos wastes, at the scale proposed by the Appellant, must comply with the requirements of the legal framework set out in Section 2 above, notably the requirements of Article 11 as applied by the EPR 2016.
- 61. The Agency considered that it could be possible to vary the current permit to permit the asbestos treatment process to be undertaken in a controlled manner, subject to stringent conditions.
- 62. Permit number EPR/HP3632RP/V003 for ERQ was issued 02 June 2021. This existing permit includes conditions requiring the operator to implement standards expected for the sector which meet the requirements of our guidance for minimising the risk of airborne fibres.

- 63. The Agency therefore varied the permit to include similar conditions to those previously issued in ERQ permit that were not appealed by Waste Recycling Group (Central) Limited.
- 64. The Appellant is currently in process of discharging preoperational conditions to allow full operation of a mechanical screening of soil containing asbestos operation through permit variation application reference EPR/HP3632RP/V005.
- 65. The October 2023 EP applies conditions which, as explained above, allow the Appellant to operate the asbestos treatment process while ensuring all necessary measures are taken to minimise the risks posed by the storage, handling and treatment of asbestos contaminated wastes.
- 66. The Agency has applied the basic principles of BAT when assessing the AIV as detailed above.
- 67. "All the appropriate preventative measures are taken against pollution"

 The varied conditions of the October 2023 EP set the standards the Agency considers the Appellant has to meet to comply with the requirement that all the appropriate preventative measures are taken against pollution.
- 68. "The Best Available Techniques are used"

 The key BAT measure is to capture and contain emissions from the asbestos soil treatment activities. As above, the Agency considers that the conditions set in the varied permit could allow the Appellant to comply with the requirements of BAT, by enclosing and abating the screening process and demonstrating compliance via the pre-operation and improvement conditions, and the required monitoring set in the varied permit.
- 69. "No Significant Pollution is Caused"

As explained in the Extant Appeal and above, the Agency considers there is the potential for pollution from the asbestos treatment process as proposed by the Appellant. 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 (which is set out in the Agency's SoC for the Extant Appeal). The Agency takes the precautionary approach that there should be no pollution of asbestos fibres within the environment. Therefore the Agency takes the position that activities that may give rise to emissions should not be in an exposed environment. Any mechanical screening of asbestos operation should be enclosed and abated so that emissions of asbestos fibres from the process are minimised. The Agency considers that the conditions of the October 2023 EP allow the Appellant to operate the asbestos treatment process, subject to the conditions set, along with the discharge of the preoperational and improvement conditions outlined above and the necessary required monitoring to confirm compliance set in the varied permit in a way which will ensure no significant pollution is caused.

Section 4: Dangers of Asbestos

70. The Extant Appeal outlines our position on the dangers of asbestos and is not repeated here.

Section 5: Permit Determination

- 71. The Agency has already stated in Section 3 that variation EPR/BS7722ID/V009 was issued in error without the necessary controls on the asbestos treatment process to prevent and minimise emissions. The Agency decided to undertake an Agency Initiated Variation on 25 August 2023.
- 72. The permit variation was issued on 5 October 2023.

Section 4: The Appellant's grounds for appeal and the Agency's response

73. The Agency has set out below the Appellant's grounds for the appeal as stated in their appeal statement (in italics for clarity) and then set out our response to the points above.

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

- 74. 6.2. The Appellant will demonstrate that the Proposed Activity, as applied for in the MG Application, is fully compliant with BAT.
- 75. 6.3. As set out in the MG Application, 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.
- 76. 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 operates facilities to strict internal controls so as to avoid, where at all possible, any asbestos related emissions.
- 77. The Agency's position regarding the Appellant's Proposed Activity at Daneshill (similar to Maw Green) is covered in the subject matter of the Extant Appeal and is not repeated here.
- 78. 6.5. There is no justification for the inclusion of Improvement Reference 5 in Table S1.3 of the October 2023 EP. The EA's position fails to recognise that the Proposed Activity will not be receiving homogenous waste streams and fails to adopt an appropriate, risk based approach based on the best available evidence. The EA's position is incoherent and internally contradictory. It seeks to impose an unachievable requirement that the screening component Proposed Activity must not result in the generation of 'additional' asbestos fibres. This fails to have any regard to the key issue of whether the Proposed Activity would result in a material risk to the environment or human health. It further fails to have any regard to the fact that the EA permits the handpicking of asbestos fragments at this and other installations notwithstanding the EA's accepted, "...risk of fibre release from handpicking..."
- 79. The Agency considers that Improvement Condition 5 in table S1.2 of the October 2023 EP is important to demonstrate that the screening of asbestos wastes is fundamentally not increasing the level of risk posed by the asbestos containing wastes being screened

and segregated into different streams. It is already stated as the Agency's position in the Extant Appeal that asbestos containing materials can be damaged by energetic processing, and could result in increased small asbestos fragments and fibre releases. The condition requires a period of sampling of the incoming wastes and the segregated streams over the first four months of operation. As set out in the Decision Document accompanying the October 2023 EP, the intention of the condition is to demonstrate that:

- The mechanical screening process is working as intended in separating the bonded asbestos waste fraction in the hand-pickable stream;
- The asbestos screening itself is not creating additional asbestos fibre contamination, and
- The residual waste streams are suitably low in asbestos contamination to allow reuse without endangering human health or without harming the environment.
- 80. The Appellant's mechanical screening process separates soils into three fractions (0-15 mm, 15-50 mm and 50 mm+ size). The Appellant intends to handpick the 15-50 mm fraction. The 0-15 mm and 50 mm+ fractions would not be treated further by hand picking, but assessed visually for asbestos contamination and sampled prior to further biotreatment or reuse. The asbestos cement fragments hand-picked from the 15-50 mm fraction are removed and sent for appropriate disposal, while the remaining soil will be assessed in the same manner as the other fractions.
- 81. Handpicking relies on the asbestos fragments being visible to the naked eye. There is a risk that the energetic mechanical screening process could result in damage of the asbestos cement. As well as potentially creating additional asbestos fibres which could then be released to air, this could also result in either:
 - (i) asbestos cement fragments being too small to be hand-picked accurately (hand picking relying on workers identifying, by naked eye, asbestos cement fragments in the waste and then picking them from the moving conveyor belt);
 or
 - (ii) small asbestos cement fragments falling through the screen into the 0-15 mm fraction, potentially causing increased asbestos concentration in that fraction.
- 82. As noted above, in case (ii) no further asbestos treatment is undertaken. If no asbestos fragments can be identified visually, the picking process is considered to have achieved its objective. The waste output would need assessment against the hazardous limit of 0.1% w/w asbestos threshold in accordance with the Agency's WM3 Waste classification technical guidance. Any waste containing over 0.1% w/w asbestos would be considered a hazardous waste and need landfilling in an appropriately permitted landfill. It should be remembered that for incoming asbestos contaminated wastes the Appellant's proposed acceptance threshold for asbestos for this process could include up to 0.1% w/w free asbestos in the soil, in addition to the discrete pieces of cement bonded asbestos intended for picking. Due to its distributed nature in the soil fraction, an unintended consequence of screening out material could be to increase the concentration asbestos contamination in the 0-15 mm fraction, by either:
 - (i) creating more asbestos contamination by damaging asbestos material during handling and treatment as discussed above: or

(ii) the removal of other uncontaminated materials via the screen (such as larger stones in the 15-50 mm and 50 mm+ fractions).

The likelihood needs to be assessed, as there is potential for this asbestos contamination to be spread onto the landfill via the soils used for restoration. This is the subject of Improvement Condition 5 provides a mechanism for this assessment.

- 83. 6.6. The EA has failed to provide any evidence (technical or otherwise) to support its assertions in the October DD that the Proposed Activity will result in any material increase in the amounts of asbestos fibres which may be released, or indeed to support any of the assertions made by the EA in the October DD.
- 84. As explained in the Extant Appeal and in this SoC, the Agency considers there is the potential for pollution from the asbestos treatment process as proposed by the Appellant. The Agency has therefore taken a precautionary approach and considers the conditions set in the October 2023 EP are proportionate.
- 85. 6.7. The Appellant will demonstrate, via the analysis of robust monitoring data, that the Proposed Activity will not result in any material increase in the amounts of asbestos fibres which may be released and will not pose any material risk to the environment or human health.
- 86. 6.8. 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.
- 87. The Agency's position regarding the points 6.7 and 6.8 and the Appellant's Proposed Activity at Daneshill (and applicable for Maw Green) is covered in the subject matter of the Extant Appeal and is not repeated here.
- 88. 6.9. The EA has not published any guidance which addresses the requirements of BAT specifically in the context of the remediation of ACMs.
- 89. Paragraphs 121 to 127 of the Agency's SoC for the Extant Appeal covers the applicable BAT guidance available for reference for installation activities. The Agency considers the use of a mechanical screener a novel process for the remediation of asbestos contaminated soil at an installation. The WT BREF provides very limited guidance on asbestos treatment. Section 5.8.4 mentions thermochemical conversion technology using chemical treatment and heat to bring about a remineralisation of asbestos, but does not cover any further treatment techniques for wastes containing asbestos. Treatment of excavated contaminated soil is covered in WT BREF Section 5.6.1, but this section does not cover treatment of asbestos in soils. The reasons why operation of a fixed plant is different to a short-term temporary contaminated land remediation situation is covered in the SoC for the Extant Appeal.
- 90. 6.10. The October DD does not disclose any technical basis on which the EA relies to assert that, in this context, BAT requires all ACM related activities at the STF to be undertaken within a building and/or that the mechanical screener must be 'fully enclosed'. The EA's position is characterised by assertions which are unsupported by evidence,

- technical or otherwise. The Appellant's expert evidence will demonstrate that the Proposed Activity complies with BAT.
- 91. The Agency's SoC for the Extant Appeal sets out in detail our concerns regarding the high risks posed by asbestos, and risk posed by the Appellant's proposed mechanical screening treatment process for asbestos contaminated soils creating diffuse emissions of asbestos. The reasons for full enclosure are set out in Section 3 above.
- 92. 6.11. Reference is made by the EA in the October DD to the use of 'full enclosure' and HEPA filters at other facilities, without providing any details or evidence to support this. The Appellant is not aware of any other facility which operates using a 'fully enclosed' screener.
- 93. Other facilities for asbestos treatment are permitted to operate in this manner, including ERQ previously mentioned with a screener. Other facilities include Tetron and Thermal which also treat asbestos in a manner which the Agency considers fully enclosed (albeit not using a mechanical three-way screener).
- 94. 6.12. The EA imposed similar conditions requiring 'full enclosure' of a mechanical screener for ACM related activities at the landfill site at Edwin Richard's Quarry ("ERQ"). Repeated applications were made to comply with the condition imposed at ERQ and demonstrated that it is not possible for this condition (as interpreted by the EA) to be complied with. The Appellant will refer to and rely upon the efforts made to discharge this condition at ERQ as part of its evidence to this appeal, including the EA's recent refusal to agree a local enforcement position which would have provided the Environment Agency with further monitoring data (tested by a UKAS accredited third party laboratory) from the operation of the mechanical screener on asbestos emissions at ERQ to provide additional reassurance regarding the negligible level of risk.
- 95. Preoperational Condition 1 in the permit for the Appellant's landfill site at ERQ states that the operator shall provide: "Evidence to demonstrate that the mechanical screener is fully enclosed and all dust emissions from the screening operation are <u>directed</u> to an active abatement system with a HEPA filter or other suitable design."
- 96. To satisfy this condition the operator submitted proposals to house the separation process with a large building served by a HEPA filter.
- 97. The Agency responded to this submission stating: "All parts of the screening process must be fully enclosed, abated and <u>routed</u> to a point source or sources.
- 98. The Appellant provided no demonstration that all emissions are <u>routed/directed</u> to the abatement, instead it was outlined that the emission would be allowed to spread throughout the building and drawn towards the HEPA filter. This submission therefore did not demonstrate how the emission was sufficiently enclosed to be contained and routed/directed to abatement to prevent spread and entrainment of fibres over a larger area and possible resuspension. The Agency therefore did not accept this proposal as discharging the pre-operational condition.
- 99. 6.13. The Appellant will contend that the EA has failed to have proper regard to the need to prevent or reduce to a minimum the overall impact of any emissions on the environment

and the risks to it. The EA's decision conflicts with the objectives of ensuring that waste is managed in accordance with the waste hierarchy and the duty imposed by the Hazardous Waste (England and Wales) Regulations 2005, which requires the Appellant to separate hazardous waste where technically and economically feasible.

- 100. The Agency considers it has had proper regard to both the principles of the waste hierarchy and the requirements of Hazardous Waste (England and Wales) Regulations 2005. Achieving these requirements does not remove the legal requirement to also meet the requirements of Article 11 as set out in Section 2 above. The EPR 2016 requires the Agency, as a regulator, to exercise its functions to achieve "...a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land and preventing the generation of waste." The Agency considers that the conditions set in the October 2023 EP achieve this aim and allows the Appellant to operate the process.
- 101. 6.14. The Appellant will rely upon the EA's acceptance that the Appellant has demonstrated BAT is complied with in respect of any dust emissions arising from the non-ACM related activities which have been included within the October 2023 EP.
- 102. The Agency has not varied the non-asbestos related activities with respect to dust for the October 2023 EP. The enclosure/abatement requirements described above in Section 3 for the asbestos treatment process are what the Agency considers necessary as BAT for asbestos treatment. Our SoC for the Extant Appeal, paragraphs 136 to 141 outlines our approach at Daneshill regarding fugitive dust and asbestos.
- 103. 6.15. The Appellant reserves the right to respond to any new technical or expert evidence which the EA seeks to submit through the Appeal process.
- 104. The Agency also reserves the right to respond to any new evidence which the Appellant seeks to submit through the Appeal process.

Ground Two - the EA has mis-interpreted (a) BAT14 and (b) BAT 14(d);

(a) BAT14

- 105. 6.16. The EA has adopted an erroneous interpretation of BAT14 which places undue reliance on selective parts of BAT14d.
- 106. 6.17. The EA considers that any mechanical screening of ACMs at the STF must be 'fully enclosed' with all asbestos emissions arising from the mechanical screener being "treated via an abatement system prior to release".
- 107. 6.18. As noted above, in respect of ELVs the October DD states that: 6.18.1. "[ELVs] based on BAT, have been added for the following substances:
 - Particulate matter (dust) = 5mg/m3 (BAT-AEL requirement)
 - Asbestos fibres = 0.1 f/ml (Environment Agency requirement)

We made these decisions in accordance with Chemical Waste Appropriate Measures and the Waste Treatment Best Available Techniques Conclusions ("BATCs")."

- 108. 6.19. The October 2023 EP goes on to propose an ELV for ambient emissions of asbestos fibres which is inconsistent with the EA's express conclusion in the DD on this issue (0.01 f/ml as opposed to 0.1 f/ml).
- 109. The Agency has set out in Section 3 of this document that reasons for the emission limit values in the October 2023 EP. Both the October 2023 EP and DD state 0.1 f/ml for the emission limit to air from the abated screener.
 - The 0.01 f/ml limit is for ambient air monitoring. As explained in Section 3 this is a monitoring limit for asbestos fibres in ambient air around the facility, rather than an emission limit value for the channelled emission point from the abated screener.
- 110. 6.20. It should be noted that the EA has not adopted any guidance nor adduced any evidence which supports its assertions that: i) all ACM related activities must be located 'within a building' to be compliant with BAT; ii) that the screener must be 'fully enclosed' in order for the Proposed Activity to be compliant with BAT; iii) that the ELV for ambient emissions of asbestos fibres should be 0.01 f/ml (as opposed to 0.1 f/ml). Neither has the EA carried out any assessment which considers the practicability of any such policy approach being imposed on industry, having regard to the wider objectives of the IED and the need to ensure waste is managed in accordance with the waste hierarchy. No evidence has been provided by the EA to support its assertion in the October DD that its decision to issue the October 2023 EP complies with the growth duty imposed by Section 108(1) of the Deregulation Act 2015 and the guidance issued in accordance with Section 100 of the Deregulation Act. The Appellant will demonstrate that the EA's decision will unduly constrain its ability to provide much needed treatment for ACMs and obstruct the restoration of the Maw Green Landfill. The EA has failed to provide any evidence that its decision to issue the October 2023 EP subject to conditions for ACM related activities is consistent with other relevant decisions taken by it. The Appellant reserves the right to respond to any evidence and/or submissions made by the EA in respect of these matters.
- 111. An error was made in the issuing of Application EPR/BS7722ID/V009. This decision was not in line with the existing decisions issued and the precautionary BAT approach applied nationally to the mechanical treatment of asbestos. The Agency considers at this point that there is insufficient evidence to support mitigation measures other than enclosure of abatement for the mechanical screening of asbestos.
- 112. In line with the approach for this sector as set out in Section 3 above, the Agency considers that the Appellant could undertake treatment in a manner that prevent pollution and meets the requirement of BAT by enclosing and abating the screening process. The Agency has therefore varied the permit as described to allow the asbestos treatment activity. This is similar to the approach taken for ERQ and Daneshill with a preoperational condition (though we note some minor differences in condition wording in permits as we have developed our position). The Agency considers this approach is consistent with our other decisions at permitted sites handling soils containing asbestos. The Agency also reserves the right to respond to any evidence and/or submissions made by the Appellant in respect of these matters.

- 113. 6.21. It is not technically feasible for the mechanical screener to be 'fully enclosed' so that any emissions arising from it can be collected and directed to a HEPA filter. The Appellant has been unable to locate any 'fully enclosed' mechanical screener which is available on the market. The operation of mechanical screeners (which are used regularly in a wide variety of waste related treatment processes) is adversely affected by attempts to achieve 'full enclosure' via retrofitting the equipment. In the case of the permit for ERQ, attempts to discharge a similarly worded condition, to comply with the EA's requirements have been unable to find any technical solution which is capable of 'retro-fitting' a mechanical screener so as to ensure it is 'fully enclosed' as required by the EA. The Appellant will rely on this evidence in the appeal. The Appellant will contend that it would be impossible for it to comply with pre-operational condition 4 of the October 2023 EP.
- 114. The requirements for enclosure to minimise dust and other fugitive emissions to air that are required under BAT and Appropriate Measures are met at many permitted facilities handling hazardous wastes in general, and specifically at sites handling soils containing asbestos as listed above. The specific process design to achieve this is down to the operator to demonstrate in any permit application they make to us in order to achieve the this and prevent or minimise emissions to air.
- 115. 6.22. Furthermore, the EA has made explicit its requirement for all ACM related activities at the STF to be located within a building. However, its position in this respect is internally inconsistent. Firstly, the DD accepts that the Appellant's proposed enclosed Handpicking Station is compliant with BAT as originally applied for (it was not proposed to be located in a building). Secondly, there is no requirement, in the October 2023 EP, for any emissions which arise within the building itself (which the EA says must be provided to minimise the risks of asbestos fibre release) to be collected and directed to an abatement system. Furthermore, the construction of temporary buildings would result in greater environmental impacts as a whole and would effectively preclude the STF from being able to operate.
- 116. The proposed handpicking station is enclosed and the Agency considers that to be compliant with the requirement to be within a building. The untreated waste soils should be kept enclosed. Treated (and partially treated) waste soils awaiting confirmation of compliance with asbestos contamination criteria should be enclosed until the testing is undertaken and compliance confirmed. The Agency requirement for a building is set out in Section 3 above. The requirement for enclosure with abatement applies to the mechanical screening activity, not storage of waste, as there is a lesser risk of emissions from storage. The Appellant is required to mitigate emissions from storage in table S.1.1 AR3A and AR4 (via covering and/or dampening or other measures). By virtue of being in a dampened condition (or otherwise mitigated) and by being protected from the wind, sun etc. within the building, any asbestos should be effectively contained from further spread into the environment. This is in line with the requirements of BAT14 and the WT Bref requirements for storage. The Agency does not consider a temporary building would result in a greater environmental impact.
- 117. 6.23. 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 requires) and such an interpretation would: i) fail to ensure waste is managed in accordance with the

- waste hierarchy and ii) conflict with the Appellant's duties to ensure hazardous waste is separated where technically and economically feasible.
- 118. The Agency's position on the waste hierarchy and the duty to separate hazardous waste is set out in Section 4, Ground One, above. We do not see a conflict in the requirements of these legislative requirements.
- 119. 6.24. 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".
- 120. 6.25. 8 separate techniques (a. to h.) are then set out within the BAT Conclusion as forming part of BAT14.
- 121. 6.26. 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.
- 122. 6.27. 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 <u>reduction</u> of diffuse emissions to air.
- 123. The Agency's position on the above points is addressed in paragraph 152 of our SoC for the Extant Appeal and is not repeated here.
- 124. 6.28. 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:
- 125. 6.28.1. 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).
- 126. The Agency's position on the above points is addressed in paragraph 155 of our SoC for the Extant Appeal and is not repeated here.
- 127. 6.28.2. 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, and the containment of the picking station;
- 128. The Agency's position on the above points is addressed in paragraphs 157 to 158 of our SoC for the Extant Appeal and is not repeated here.
- 129. 6.28.3. BAT14e the Application proposes that the waste will be dampened throughout all stages of the waste being handled at the Site.

- 130. This is addressed in paragraph 155 of our SoC for the Extant Appeal and is not repeated here.
- 131. 6.29. 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.
- 132. As discussed above BAT 14 requires the prevention of diffuse emissions to air unless it is not practicable to do so, in which case they must be reduced. The Agency 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. In the Extant Appeal the Appellant offered the option of partial enclosure. The Agency considers it would not be significantly more effort to fully enclose the screening operation. In the October 2023 EP the Agency has set the standard to be achieved but set Pre-operational Condition 4 so that the Appellant can provide their own specification of how they will meet the requirement. 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 Agency would consider these restrictions in any submission made under the pre-operational condition.
- 133. 6.30. The Appellant will contend that the EA has failed entirely to explain (and support any such explanation with objective technical evidence) why it considers that the combination of measures proposed by the Appellant is not 'appropriate', within the meaning of BAT14.
- 134. 6.31. The Appellant will demonstrate that it has investigated the availability of equipment specifically designed for the treatment of ACMs. The Appellant will demonstrate that the EA has approved for use, in comparable circumstances, identical equipment as that which will be used by the Proposed Activity; reference will be made to case studies (including but not limited to those within the NICOLE Report) in support of the Appeal and to the techniques deployed during the operation of the STF permitted at the site in accordance with the mobile treatment licence.
- 135. The above paragraphs are addressed in paragraph 164 to 168 of our SoC for the Extant Appeal and is not repeated here.
- 136. 6.32. The Appellant will contend that the conditions imposed by the EA on the Proposed Activity are unjustified and unreasonable. The EA has failed to provide any specification as to why it considers the combination of techniques falling within BAT14 as proposed by the Appellant are not 'appropriate' having regarding the relevant facts. The Appellant will require the EA to disclose, through the course of this appeal, the details of all technical specialists who provided expert assessment prior to the decision to issue the October 2023 EP and details of the substantive technical assessment which was undertaken. The Appellant reserves the right to respond to further submissions and/or evidence which the EA submits during the course of the appeal.

137. The Agency has set out previously the reasons it is considered necessary to apply the appropriate conditions. The Agency considers that the conditions proposed for the October 2023 EP are necessary for achieving a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land. The reasoning behind our decisions on the conditions is set out in this Statement of Case.

(b)BAT14d

- 138. 6.33. BAT14 states that, "Depending on the risk posed by the waste in terms of diffuse emissions to air, BAT14d is especially relevant" (emphasis added). The level of risk which triggers the 'especial relevance' of BAT14d is not prescribed in BAT14. The Appellant will contend that the EA has failed to properly understand and apply this aspect of BAT14 and BAT14d, in the context of the risks posed by the ACMs which will be recovered by the Proposed Activity.
- 139. 6.34. BAT14d relates to the "containment, collection and treatment of diffuse emissions" and "includes techniques <u>such as</u>:- storing, treating and handling waste and material that may generate diffuse emissions in enclosed buildings and/or enclosed equipment (e.g. conveyer belts); maintaining the enclosed equipment or building under adequate pressure; collecting and directing the emissions to an appropriate abatement system..." (emphasis added).
- 140. 6.35. Even where BAT14d is "especially relevant" it does not require that all of the techniques described <u>must</u> 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.
- 141. 6.36. 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.
- 142. 6.37. 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.
- 143. The points put forward above by the Appellant regarding BAT 14(d) are addressed by paragraphs 175 to 178 of our SoC for the Extant Appeal and are not repeated here. The Agency considers the risks posed by the asbestos treatment process are addressed by the conditions imposed in the October 2023 EP.
- 144. 6.38. The wording of BAT14d explicitly provides for 'containment' of diffuse emissions.

 Accordingly, the BAT Conclusion plainly envisages 'partial' enclosure of certain parts of

- equipment and processes (for example, where such enclosure is 'available') as being compliant with BAT14d.
- 145. 6.39. It is therefore erroneous to interpret BAT14d as requiring all ACM related activities to be located within a building and/or otherwise 'enclosed' in every case. Such a conclusion is not supported by the wording of BAT14d itself. Neither does it support 'enclosure' of equipment in situations where the relevant plant/equipment is not available on the market in an enclosed form.
- 146. It is helpful to refer to paragraph 2.3.5.3 of the WT Bref which considers the requirements that form BAT14d in more detail the measures considered for preventing and reducing diffuse emissions. It states (with emphasis added):
 - ...Several operational and design measures might be selected, on the basis of the expected type of emissions...:

Containment and collection of diffuse emissions

- <u>To store, treat and handle waste and material that may generate diffuse</u> <u>emissions in enclosed buildings and/or enclosed equipment (e.g. conveyor belts).</u>
- To enclose (partially or completely) liquid effluent drainage systems and tanks used for liquid effluent storage/treatment. Emissions from tanks containing wastes that may generate emissions to air (such as VOCs) are controlled, e.g. with flow-balancing systems, and/or abated, e.g. with activated carbon filters.
- To minimise emissions during sampling by using closed sampling systems or in-line analysers.
- To install a maintenance drain-out system to eliminate open discharges from drains.
- To cover conveyor belts, especially the connection points and discharge areas.
- To enclose transfer points and sorting facilities.
- To ensure enclosure by work instructions or automation, e.g. closing doors.
- a. To have the enclosed equipment or buildings under adequate pressure;
- b. To have the enclosed systems or buildings equipped with extraction, and connected to a suitable abatement system.
- c. To design extraction systems to take into account the removal of the large volumes of air present due to the dimensions of the mixing areas and the need to have vehicular access for loading and unloading. The extraction systems are capable of controlling all foreseeable emissions, other than in emergency situations.
- To have localised extraction and/or misting/sprinkler systems on equipment with significant dust formation (e.g. screening drums) or in storage areas, at handling or dust-intensive process steps such as unloading. These systems distribute a fine spray of water that stops the dust from rising while binding the water at the same time to prevent waste water.
- To use air suction systems close to the emission sources.
- To have separate suction and abatement units for sorting and transportation units.
- To use wind barriers.

Selection of input waste

• To place emphasis on pre-acceptance screening (see Section 2.3.2.1) and on the rejection of specific wastes. For example, and particularly for odorous materials, they

need to be handled in dedicated sealed handling areas which incorporate an extraction system leading to abatement equipment.

Storage of waste

- To store containerised wastes under cover. Covered areas have adequate provision for ventilation (resulting in the storage area being kept acceptance), quarantine, or which is being emptied, repackaged or otherwise managed.
- The air is treated before it is released depending on the type of contamination, if any.
- To store drums and containers of odorous materials in enclosed buildings connected to abatement units.
- <u>To store the waste and materials that can generate diffuse emissions of dust</u> (e.g. SLF, SHF in the case of shredders) in enclosed buildings or containers.
- To minimise the height of waste piles that can generate diffuse emissions.
- To install extraction systems for dust abatement or spray damping in storage bunkers.
- 147. The Agency would consider a contained emission to be one held within some kind of containment system for pollution prevention (for example: "secondary containment" is a term commonly applied to a bund system around a tank containing a liquid the purpose being to hold the liquid contents within the bund should the primary tank fail, thereby preventing pollution). Ultimately the contained emission has to be discharged in a manner which prevents or reduces the impact of that emission, to be in accordance with the wider BAT14 requirement. A partial enclosure that would result in emissions escaping would clearly not be a contained system. A fully enclosed system would be a system that can contain all likely emissions and direct them to an appropriate abatement system. BAT14 is clearly worded to allow flexibility in application, but does emphasise the relevance of BAT14d on containing, collecting and treating diffuse emissions to air.
- 148. The Agency agrees that BAT 14d allows flexibility regarding which measures are applied, but for the reasons set out in the SoC for the Extant Appeal regarding risks from asbestos and the proposed open screening activity, the Agency considers the measures applied in the October 2023 EP as described in this document are BAT for containing, collecting and treating diffuse emissions to air under BAT 14d from the asbestos treatment process.
- 149. 6.40. As mentioned above, there is an inextricable link between the relevance of BAT14d, and the need of any specific proposals to comply with its terms, and the level of risk to the environment and/or human health posed by the particular waste stream under consideration. The greater the risk, the higher the level of containment will likely be required to comply with BAT14d. Conversely, the lower the risk, the less likely that containment will be required in order to ensure compliance with BAT14d.
- 150. 6.41. The October DD 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 MG 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.

- 151. The Agency is clear in the SoC for the Extant Appeal and supporting documents that there is a high degree of risk and no safe level of asbestos. The NICOLE Report also cautions about risks around poor remediation practices for asbestos "zero tolerance or an abundance of caution towards asbestos can drive remediation towards "non-detect" solutions.
- 152. As previously covered the wastes types proposed to be accepted by the Appellant are soils containing broken fragments of bonded asbestos. The CL:AIRE CAR-SOIL industry guidance states in section 3.5.3 (emphasis added):
 - 11.4 Where asbestos fibres are firmly linked in a matrix they do not normally break down easily and do not tend to release 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.
 - 115. In certain types of ACM, the asbestos fibres will usually be firmly linked in a matrix and will not be released easily. This includes:
 - asbestos cement, (<u>unless it is substantially fragmented, crushed, or otherwise significantly damaged</u>);
 - textured decorative coatings;
 - paints with asbestos, any article of bitumen, plastic, resin or rubber which contains asbestos where its thermal or acoustic properties are incidental to its main purpose such as vinyl floor tiles, electric cables and roofing felt.
 - 116. Work with these materials will generally not be NNLW, provided they are in good condition and the work to be done on them will not result in significant break up or deterioration of the material.
- 153. Furthermore in section 3.4.1 regarding low intensity work it states:
 - 108. To meet the requirements of the exemption in regulation 3(2) low intensity work may be considered to be work involving processes that will not cause further deterioration of the asbestos materials and where there is a reduced likelihood of fibres being released by the activity.
 - 109. This will be determined by the nature of the work. A common sense approach to decide whether work can be low intensity work should be taken. For example, this type of work could include mechanical excavation of soils, but would almost certainly not include mechanical crushing and/or screening of C&D materials.
- 154. It is therefore clear that fragmented bonded asbestos is not considered an inherently low risk material, and that mechanical screening is considered to increase the risk posed by asbestos fibres.
- 155. The CL:AIRE CAR-SOIL industry guidance also states that there are issues in precisely identifying the type of asbestos contamination in soil, notably paragraphs 42 and 51 which state:
 - 42. It may not always be possible precisely to confirm the identity of the type of different ACMs present when mixed with soil and/or C&D materials, e.g. it may be difficult, or impossible, to positively confirm that debris is asbestos insulating board

- (AIB), or to differentiate between AIB and asbestos cement, based on appearance. The confirmation of ACM type by visual identification of small fragments of degraded ACMs in the ground on-site may not be at all straightforward, since degradation and coating by the host material may disguise them to the extent that they become very difficult, if not near impossible to spot. In such situations, a more accurate description of the material would be 'soil contaminated with asbestos sheeting/board debris.'
- 51. Generally, though not always, ACM debris in the context of asbestos-contaminated soil and C&D materials may be encountered in a highly fragmented form. Materials may be weathered or degraded and bound up in the soil matrix; identification of original ACM type may prove problematic. Such debris may be present as visible, dispersed fragments and may be encountered both on the surface of a site and/or at depth. It may be homogenously dispersed throughout the ground, or it may occur as isolated occurrences or hotspots. Surface contamination may not necessarily be an indication of contamination at depth.
- 156. As this is the current accepted industry guidance, the Agency concludes from this that for asbestos contaminated soils there is a risk from both their heterogenous nature (notwithstanding the Appellant's waste acceptance criteria and acceptance procedures) and from the potential for degraded and damaged asbestos cement to be present.
- 157. The Agency considers that the conditions set in the October 2023 EP implement BAT and are necessary for the treatment operation to achieve a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land.
- 158. 6.42. The Appellant will adduce monitoring evidence of asbestos emissions in support of its appeal. The Appellant will rely on the monitoring data available in respect of the Site and ERQ to demonstrate that the risks arising from the Proposed Activity are negligible.
- 159. Without prejudicing the position taken by the Agency regarding monitoring data gained by the Appellant in the SoC for the Extant Appeal, any evidence should be provided well in advance of any Inquiry so that the Agency has sufficient time to fully review the monitoring methodology and data.
- 160. 6.43. 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).
- 161. 6.44. Furthermore, the Appellant will contend that in reaching its decision to issue the October 2023 EP, 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 prerequisite of BAT14. The Appellant will contend that the EA's failure in this regard has led to the unjustified decision to issue the October 2023 EP.
- 162. The Agency has presented its position above regarding BAT14d and the risks posed by both the waste stream and the intended treatment process. The Agency considers that

the conditions set in the October 2023 EP are necessary for the treatment operation to achieve a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land.

Ground Three – the Proposed Activity complies with Article 11 of the IED.

- 163. 6.45. As set out above, the Appellant will demonstrate that the Proposed Activity, as per the MG Application, fully complies with BAT and that the EA's decision to impose conditions on the October 2023 EP is predicated on an erroneous and unjustified interpretation of BAT.
- 164. 6.46. The Appellant will adduce expert evidence to demonstrate that Article 11 of the IED is fully complied with by the Proposed Activity as:
 - 6.46.1. All appropriate preventative measures are taken against pollution.
 - 6.46.2. No significant pollution is caused.
 - 6.46.3. In accordance with Directive 2008/98/EC, the asbestos contaminated soils will be recovered for re-use
 - 6.46.4. Necessary measures are taken to prevent accidents and limit their consequences.
- 165. 6.47. The Appellant will adduce technical data to demonstrate, by way of expert evidence, that the proposed Activity will not result in significant pollution.
- 166. The Agency's position regarding the Appellant's Proposed Activity, is set out in the documentation for the Extant Appeal. The Agency has explained in this document the consideration of BAT for the October 2023 EP, and why the conditions are necessary. The Agency has conceded the point that the Agency erred in its original decision and therefore the Agency used an AIV to rectify this point. Consequently, the Agency would invite the Planning Inspector to have regard to the Agency's Decision for the AIV rather than its original decision.
- 167. 6.48. The Appellant's expert evidence will address and explain the definition of hazardous waste in the context of ACMs and will provide quantitative data to demonstrate the magnitude and/or quantum of bonded asbestos which is expected to be processed by Provectus at the STF, based on the operation of existing facilities.
- 168. 6.49. 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.
- 169. 6.50. The Appellant will contend that the dispersion of emissions would further lower the potential risks of exposure (which are negligible in any event).

- 170. The Agency has responded regarding the monitoring data in the SoC for the Extant Appeal and it is not necessary to repeat the position here, other than to reiterate the request that any data is supplied to the Agency well in advance of the Appeal so that it can be fully reviewed.
- 171. Dispersion of asbestos into the environment, without any attempt to prevent or minimise, is not a suitable option for asbestos mitigation. Dispersion of fibres may lead to the gradual spread and remobilisation of fibres outside the site over time. The Agency's guidance M17 states (emphasis added):

"7.4.3 Guideline limits for fibres

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. <u>Exposure should</u> therefore be kept as low as possible and asbestos should not be found above background levels at site boundaries."

This requirement for no asbestos fibres above background levels at the site boundary should be considered the objective for mitigation measures aimed at controlling asbestos fibre releases.

- 172. 6.51. The Appellant will contend that the EA has failed to have proper regard to the controls which are in force pursuant to the Asbestos Regulations. The Asbestos Regulations (which are not a substitute for BAT) are a further legislative control which ensures that the Proposed Activity cannot be undertaken if it would result in significant pollution. The Asbestos Regulations would be fully complied with by the Proposed Activity. Furthermore, the EA has failed to have regard to the clear advice of the UK HSA, as set out in the July DD.
- 173. The Appellant concedes that the Asbestos Regulations are not a substitute for BAT. The Asbestos Regulations are designed to protect workers and not the wider environment, and in some cases these aims may be at odds.
- 174. The UKHSA consultation response states: "This consultation response is based on the assumption that the permit holder shall take all appropriate measures to prevent or control pollution, in accordance with the relevant sector guidance and industry best practice". Therefore their statement of no significant concerns is on the basis that the operator applies the appropriate measures and best practice. The Agency does not consider the Appellant to have done this.
- 175. The Agency considers that the measures proposed in the October 2023 EP are BAT for the process and achieve a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land.
- 176. 6.52. The Appellant will contend that the EA has adopted an erroneous and internally inconsistent approach; the EA accepts that it is lawful and appropriate for exactly the same activities to be undertaken at sites where a mobile treatment licence has been

issued. This directly conflicts with the EA's allegation, set out in the DD for the EP, that the Proposed Activity, would result in significant pollution risks when proposed at a stationary installation. The apparent distinction relied upon by the EA (in so far as it is possible to currently understand their case on this point) that BAT does not apply to a mobile installation flies in the face of the EA's statutory obligations pursuant to the Environment Act 1996. The Appellant will contend that the EA's approach to mobile treatment licences is equally relevant to the appeal against the October 2023 EP; the conditions imposed therein by the EA are unjustified and unreasonable and directly conflict with the approach taken to mobile treatment licenses where precisely the same activities are undertaken. Furthermore, they will effectively render the Proposed Activity entirely unviable.

- 177. As the Agency states in the Extant Appeal documentation, 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).
- 178. A long-term fixed site, operating without the necessary control measures in place, could lead to years of fibre emissions, ongoing entrainment of asbestos fines and the gradual spread and remobilisation of fibres outside the site over time. As the STF is a long-term fixed site, the Agency considers it is feasible to require the necessary control measures to be in place, in accordance with the principles of BAT set out above, to achieve a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land.
- 179. 6.53. As noted above in Section 3, the Appellant appeals conditions imposed on the October 2023 EP as particularised in Table S1.1 at AR6 and AR7. For the avoidance of doubt, the Appellant contends that the EA's decision to impose any or all of the following is entirely unjustified:
 - 6.53.1. 'full enclosure' of the screener for ACMs;
 - 6.53.2. location of all ACM related activity within buildings:
 - 6.53.3. restricting treatment of ACMs to 100 tonnes per day;
 - 6.53.4. requiring recovered ACMs to be used on the landfill at the Site as cover. The EA appears to have fundamentally misunderstood the Appellant's proposals in this regard. There is no ongoing landfilling at the Site and accordingly no need for materials to be used as 'cover'. The reclaimed non-hazardous material will be used in the restoration of the landfill;
 - 6.53.5. restricting storage of ACMS to a maximum of 150 tonnes.
- 180. The Agency considers that the conditions imposed in the October 2023 EP represent BAT for the treatment of asbestos contaminated soils in this manner. The Agency set what were considered reasonable tonnage limits but would not object to revision of these figures to suit the Appellant's needs, providing that the other requirements of the conditions are complied with. Additionally, the Agency notes and agrees that the

- recovered waste soils will not be used as landfill "cover", but as restoration materials above the landfill cap (subject to their suitability for use under the Site's restoration plan).
- 181. 6.54. In accordance with the proposed operational controls the Appellant will demonstrate by way of expert evidence, that all necessary measures will be taken to prevent accidents and limit their consequences.
- 182. 6.55. 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, and for suitable soils to be available for the purposes of landfill restoration. Disposing of ACMs in hazardous landfill, where treatment options are available to remove hazardous waste fractions, would conflict with the Appellant's legislative duties, result in wider environmental disbenefits overall and would be contrary to the furtherance of the waste hierarchy.
- 183. The Agency does not dispute that reuse of suitably treated decontaminated soil is environmentally preferrable to disposal in landfill, but the treatment must be done in a way which achieves a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land.

Section 5 Submissions Made To Extant Appeal

- 184. The Appellant makes reference to the Extant Appeal process and the associated documents provided, as support for this appeal. The Agency also adopts all of the documents submitted as part of the Extant Appeal in support of this appeal, except where these are superseded by this appeal, or where there are site-specific issues for Daneshill not addressed in this appeal.
- 185. The Agency also supports the conjoining of the three appeals (APP/EPR/636, APP/EPR/651 and APP/EPR/652) due to the common issues involved.

Section 6: Conclusion

- 186. The Agency considers that the varied October 2023 EP allows the Appellant to operate the mechanical screening process in accordance with the varied conditions, which meet the BAT requirements set out above. This allows the process to be operated in an enclosed manner and emissions of fibres abated to remove the risk of emissions of asbestos fibres to the environment, subject to the successful discharge of Pre-operational Condition 4.
- 187. The Agency has explained in this statement and the October 2023 EP Decision Document why the permit was varied. It is our opinion that there is nothing submitted in the appeal documentation that alters this conclusion and the Agency considers the appeal should be dismissed.

Section 7: List of Appendices

Copy of the permit and decision document issued to the Appellant Appendix 1 (already supplied)

Appendices common to APP/EPR/651 and APP/EPR/652 (supplied with APP/EPR/651):

- Appendix 4 Chemical Waste: appropriate measures for permitted facilities (published 18 November 2020) (online guidance - already supplied)
- Hazardous Waste Soil Treatment (already supplied) Appendix 5
- Appendix 6 BAT Conclusions for waste treatment
- Appendix 7 Best Available Techniques (BAT) Reference Document for Waste Treatment
- Guidance on the classification and assessment of waste (1st Edition Appendix 8 v1.2.GB) Technical Guidance WM3
- Appendix 9 Technical Guidance Note (Monitoring) M17 Monitoring Particulate Matter in Ambient Air around Waste Facilities Environment Agency (Version 2 July 2013)
- Copy of the Standard Rules SR2008_No9 asbestos waste transfer Appendix 10 station
- Appendix 11 Copy of the permit EPR/HP3632RP/V003 (Edwin Richards Quarry Soil Treatment Centre, "ERQ")
- Appendix 12 Copy of the permit EPR/NB3039RM/V003 (Tetron Finningley LLP, "Tetron")
- Appendix 13 Copy of the permit EPR/FP3092LH/V005 (Keltbray AWS Limited, "Keltbray")
- Appendix 14 Copy of the permit EPR/BP3136WY/A001 (Thermal Recycling (UK) Limited, "Thermal")
- JIWG CAR-SOIL Control of Asbestos Regulations 2012, Interpretation Appendix 15 for Managing and Working with Asbestos in Soil and Construction and Demolition Materials: Industry guidance