APP/EPR/636 and 651

IN THE MATTER OF:

THE ENVIRONMENTAL PERMITTING REGULATIONS (ENGLAND AND WALES) 2016

AND

APPEALS BY FCC Recycling (UK) Limited against (636) the partial refusal of a permit variation and (651) against conditions imposed by Environment Agency Initiated Permit Variation for Mechanical Screening of Asbestos Contaminated soils at Daneshill Landfill

PROOF OF EVIDENCE OF

Graham Raynes, Senior Permitting Officer

National Permitting Service - Environment Agency

Personal

- 1. I have worked for the Greater Manchester Waste Regulation Authority and then the Environment Agency for 29 years. I have been with the National Permitting Service (NPS) for 16 years in the position of Senior Permitting Officer.
- 2. I have BSc (Hons) in Chemistry from the University of Manchester Institute of Science and Technology (UMIST) and a Royal Society of Health Post Graduate Diploma in Environmental Protection from University College Salford.
- 3. As a Senior Permitting Officer in NPS, I am responsible for completing and supporting others in the assessment of permit applications from a range of sectors on behalf of the Environment Agency and in accordance with the Environmental Permitting (England and Wales) Regulations 2016 (EPR). Following the assessment, a determination decision is reached to either grant the permit or to refuse the application. I am also the Sector Lead for NPS on Hazardous waste storage and treatment permitting.

Introduction

- 4. This Proof of Evidence document has been prepared to assist the Inspector at the inquiry in respect of the Appeals, Reference Numbers APP/EPR/636 ("DH1") and 651 ("DH2"), against (for DH1) the partial refusal of a permit variation and against (for DH2) conditions imposed by an Agency-initiated permit variation. Both deal with the proposal for mechanical screening using a three-way mechanical screener followed by handpicking of asbestos contaminated soils at Daneshill Landfill by the Appellant (FCC Recycling (UK) Limited).
- 5. I became involved with permit variation reference EPR/NP3538MF/V009 when I was asked to provide technical support as Sector Lead to the Permitting Officer. After Appeal DH1 was received I took over from the original Permitting Officer after submission of the Agency's Statement of Case ("SoC") on 24 July 2023 for that Appeal. I was the Permitting Officer for Agency-initiated variation reference EPR/NP3538MF/V010. The Permitting Officer's role is to lead the determination.
- 6. Permit variation EPR/NP3538MF/V009 was partially refused 22 December 2022 insofar as it related to the acceptance and treatment of soils containing asbestos at a proposed

soil treatment facility (STF) (other activities requested by the Appellant were permitted by the variation).

- 7. 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.
- 8. An Agency-initiated variation EPR/NP3538MF/V010 was issued 29 September 2023. The variation was undertaken in response to the DH1 Appeal by the Appellant against refusal of the asbestos treatment process as applied for in variation EPR/NP3538MF/V009. After reviewing our original decision, we decided to vary the permit to include the asbestos treatment installation listed activity under Part 2 of Schedule 1 Section 5.3 Part A(1)(a)(vi) of EPR (and make changes to the existing Section 5.6 Part A(1)(a) activity for the associated storage of hazardous waste), subject to stringent conditions.

Scope and Structure of Proof

9. This proof of evidence provides details the permitting process undertaken for the permitting of the STF at Daneshill Landfill. This includes an account of the history of the determination covering the time from receipt of the Appellant's variation application EPR/NP3538MF/V009 to the issue of the Agency-initiated variation EPR/NP3538MF/V010. It also includes reasons for the key decisions made during the permit determination.

Location of site and receptors

10. Daneshill Landfill Site is located approximately located approximately 11 km Northeast from the centre of Worksop at National Grid Reference SK6755086750. The site is shown below in Figure 1. The site boundary of the permitted area of the landfill is outlined in green. The area of the STF is outlined in purple (shaded purple area is the proposed location of the asbestos treatment activity). As is evident the asbestos treatment area is very close to the Southern boundary of the site.



Figure 1: Site Location (extract of drawing number 3982-CAU-XX-XX-DR-1803 of the Appellant's variation application)

11. Figure 2 below shows the locations of the nearest receptors as presented by the Appellant in their variation application. Residential receptors are shaded in khaki green. There was some discussion regarding receptors on page 15 of the Appellant's SoC (Appendix GR01) which I consider is reasonably representative. The nearest residential receptor is the Traveller's site approximately 167 m South of the Southern site boundary.

7.35. The receptor locations for the DH Site are as follows:

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

15

			1		
7 Tomlinson Family Settlement 467311.00 386327.00 393.9	7	7 Tomlinson Family	Settlement 46731	1.00 386327.00	393.91



Figure 2 Receptor Locations (extract of drawing number 3982-CAU-XX-XX-DR-1800 of the Appellant's variation application)

Summary of Proposals

- 12. The Appellant's proposal for a STF including bioremediation (which is not subject to the Appeal) and asbestos treatment. The STF was to accept up to 29,999 tonnes per year of hazardous soils (which would include the asbestos contaminated soils) and 20,001 tonnes of non-hazardous soils per year.
- 13. The asbestos treatment activity proposed was to screen asbestos contaminated soils using a three-way mechanical screener. After screening, soils would be conveyed to a covered picking station, where visible fragments of cement bonded asbestos would be hand-picked by operatives and removed for off-site disposal to landfill. The soils treated at the STF would be used for the restoration of the wider Daneshill Landfill site.

Summary of Determination History of Variation EPR/NP3538MF/V009

14. A brief outline of the timeline is presented below. A much fuller account of the determination is presented in Section 5 of Agency's SoC for DH1 (Appendix GR02) and the SoC includes the documents and emails referred to as an Annex to the SoC (Appendix GR03).

- FCC Recycling (UK) Limited submitted a variation application EPR/NP3538MF/V009
 which was received on 05 January 2021. This included an asbestos treatment
 installation listed activity under Part 2 of Schedule 1 Section 5.3 Part A(1)(a)(vi) of EPR
 and storage of hazardous wastes under Section 5.6 Part A(1)(a).
- FCC Recycling (UK) Limited variation application EPR/NP3538MF/V009 was considered "Duly Made" (application complete enough for determination) on 16 July 2021.
- Further information was requested by the Agency on 06 August 2021 via Notice issued under Schedule 5 of the EPR.
- FCC Recycling (UK) Limited submitted a response to the Schedule 5 Notice on 01 October 2021.
- Further information was requested by the Agency via email on multiple occasions between 13 October 2021 and 31 January 2022, via email, regarding clarification for some of the Schedule 5 Notice responses and other issues.
- FCC Recycling (UK) Limited submitted a series of responses to the email requests via email between 05 November 2021 and 22 February 2022.
- The Agency sent a copy of the draft permit (which did not include the asbestos treatment process applied for by the Appellant but did include other changes to the site which had been requested) to the Appellant for review on 21 June 2022.
- FCC Recycling (UK) Limited requested a meeting with the Agency on 21 June 2022.
- The Agency declined the meeting request on 04 July 2022.
- FCC Recycling (UK) Limited asked would the Agency be prepared to review the
 decision if the Appellant was prepared to remove the three-way screener and to restrict
 the activity to handpicking only within a building on 08 July 2022.
- The Agency informed the Appellant that the Agency was not prepared to reopen the
 determination of the asbestos treatment process on 24 August 2022. The Agency also
 confirmed the variation application was designated as a site of High Public Interest.
- FCC Recycling (UK) Limited confirmed that they had no comments on the draft permit on 02 September 2022.
- The Agency notified the Appellant, and the application was advertised on Citizen Space on 21 October 2022.
- The Agency issued the varied permit (not including the asbestos treatment process) to the Appellant on 09 December 2022. The varied permit (Appendix GR04) and decision document (Appendix GR05) are presented.

- 15. The reasons for refusal of the asbestos treatment process are set out in Section 3 of the Agency's SoC for DH1 (Appendix GR02). In brief they are:
 - 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.
 - We consider that the screening process proposed by the operator is likely to agitate
 the waste, and result in the generation of asbestos fibres and result in the release of
 additional asbestos fibres from the fragments into the screened/separated waste
 fractions.
 - The operator subsequently provided details of a covered three-way screener 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.
 - 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 (Permit number EPR/HP3632RP/V003 for Edwin Richards Quarry Soil Treatment Centre ("ERQ") issued to Waste Recycling Group (Central) Limited). In particular no information was provided as to how the asbestos was separated out, and possibly, broken by the screener would be handled, bagged, transferred etc.
 - 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 handpicked. 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.
 - 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. 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.

16. Our conclusions regarding the refusal are outlined in our DH1 SoC Section 3 paragraphs 31 to 34 (Appendix GR02).

Summary of Determination History of Environment Agency Initiated Variation EPR/NP3538MF/V010

- 17. A brief outline of the timeline for the Agency-initiated variation EPR/NP3538MF/V010 is presented below.
 - We considered that an Agency-initiated variation EPR/NP3538MF/V010 could be a resolution for the Appellant's DH1 Appeal.
 - We sent a copy of the draft permit (which included the asbestos treatment process applied for by the Appellant, but subject to the conditions described below) to the Appellant for review on 01 August 2023.
 - FCC Recycling (UK) Limited provided comments on the draft permit on 15 August 2023 (Appendix GR07).
 - We issued the varied permit to the Appellant on 29 September 2023. The varied permit (Appendix GR08) and decision document (Appendix GR09) are presented.
- 18. The Agency's position is that the storage, handling, and treatment of asbestos wastes in the manner proposed by the Appellant increases the risk of asbestos fibres being released into the environment, either into the air or into the soil matrix. We considered that it could be possible to vary the current site permit to permit the asbestos treatment process to be undertaken in a controlled manner, subject to stringent conditions.
- 19. The permit number EPR/HP3632RP/V003 for ERQ was issued Waste Recycling Group (Central) Limited 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.
- 20. We therefore varied the Daneshill permit EPR/NP3538MF/V009 to include similar conditions to those issued in the permit for ERQ as we were satisfied the conditions in the permit were appropriate and these conditions have not been previously appealed.
- 21. I consider that the conditions applied to Daneshill 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 Environment Agency considers this approach to be consistent with our other decisions at permitted sites handling soils containing asbestos.

Conditions applied in variation EPR/NP3538MF/V010

- 22. 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") (Appendix GR10). The Appropriate Measures is the guidance that covers 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" (Appendix GR11).
- 23. 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) (Appendix GR12). 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 (Appendix GR13).
- 24. In consultation with Environment and Business colleagues I used the above guidance to design conditions which would satisfy the requirements of BAT. The mechanical screening process is considered novel activity for an installation and guidance is limited (see the Agency's DH2 SoC, paragraph 90 (Appendix GR14). The following conditions were applied in variation EPR/NP3538MF/V010. A more detailed account is set out in the Agency's DH2 SoC (Section 3, paragraphs 18 to 60) (Appendix GR14). I do not explain here fully what BAT for asbestos treatment is BAT for asbestos treatment is the subject

of the Proof of Evidence submitted by Paul Barker of the Environment Agency. The issued permit is Appendix GR08.

Table S1.1 (page 18)

- 25. Table S1.1 was amended to include the asbestos treatment activity (as activity AR3A) in the varied permit. This allows the operation of the asbestos treatment process as an activity at the STF. Existing activity AR4 (storage of hazardous waste) was also varied to include storage of wastes with asbestos contamination. Both activities are subject to limitations the following are applied to activity AR3A (see our DH2 SoC, paragraphs 25 to 45) (Appendix GR14):
 - 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 is 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. The Appellant's proposal for the site surfacing is for a crushed concrete surface layer, underlain by a combination of sand, geosynthetic clay liner ("GCL") and engineered fill layers (shown in Daneshill Soils Treatment Facility Proposed Layout Plan and Sections Drawings submitted as part of the DH1 variation application) (Appendix GR15).
- 29. The Agency does not consider this crushed concrete surface to demonstrate BAT for the treatment, storage and handling of asbestos containing wastes. A porous surface like

crushed concrete will allow asbestos fragments from the waste to be entrained in the surface with the potential for asbestos to be worn down and/or spread by equipment and vehicle movements, creating fibres. In addition, the necessary clearing of asbestos would be extremely difficult undertake on a surface like this as asbestos entrained in the surface is unlikely to be completely removed by cleaning processes and would continue to pose a risk. The Agency considers an impermeable surface with sealed drainage is an established standard for asbestos waste sites (see Agency's DH2 SoC paragraphs 29 to 31) (Appendix GR14).

- 30. "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 lawfully be discharged, all liquids entering the system are collected in a sealed sump.
- 31. Issues with the drainage situation were raised in the original determination (see paragraphs 57 to 59 of the Agency's DH1 SoC) (Appendix GR02). Undercover storage and treatment will minimise issues with rainfall-derived contaminated drainage.
 - The screener shall be enclosed.
- 32. 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 contained, treated, and then discharged to the environment via appropriate abatement (a high-efficiency particulate air ("HEPA") filter or equivalent), to ensure emissions are minimised in line with BAT. The requirements of BAT for asbestos treatment process is the subject of the Proof of Evidence submitted by Paul Barker of the Environment Agency.
 - Handpicking shall take place in a dedicated enclosed picking line.
- 33. This limitation is in line with the Appellant's proposal for how their handpicking line is intended to operate (albeit subject to these conditions), which is an enclosed picking line in accordance with current industry practice.

- No more than 100 tonnes per day of soils impacted with identifiable pieces of bonded asbestos shall be treated (in aggregate).
- 34. 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 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 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.

- Storage of screened waste not impacted with asbestos shall be stored outside in bays or in a building.
- 35. 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 soils prior to reuse are not covered by the Appeals.
 - Screened soil impacted with asbestos shall be stored inside a building in a way that minimises asbestos fibre emissions such as spraying and sheeting.
- 36. 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.

- 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.
- 37. 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.
 - Treated waste shall be stored for no longer than 6 months prior to transfer off-site or to the landfill as cover.
- 38. This limitation is to comply with the Chemical waste: appropriate measures, which limits storage to six months for most hazardous wastes. The six-month period limitation has been an established Agency requirement under BAT. The use of 'cover' as a term has been noted as incorrect the recovered soils will be used as restoration material (if suitable) rather than as landfill cover.
 - No more than 10 tonnes of picked asbestos shall be stored on site.
 - No more than 1000 tonnes of treated soils shall be stored on site.
- 39. These limit the amount of treated waste held at the STF. The numeric limits have been appealed by the Appellant (see DH2 SoC, paragraphs 181 to 182) (Appendix GR14). The Agency 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.
 - Non-hazardous treated soils shall be kept separate from hazardous soils.
- 40. 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 in any quantity of hazardous waste with non-hazardous waste renders the entire amount hazardous, even below applicable hazard thresholds.
 - Waste types (soil wastes only) and quantities as specified in schedule 2, table S2.8.
- 41. This specifies the waste types (by European Waste Catalogue ("EWC") Code) suitable for the asbestos treatment process at the STF, as listed in table S2.8 (page 46 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.

42. Activity AR4 in table S1.1 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 S2.8 and includes the same requirements as AR3A for the storage of waste containing asbestos.

Pre-operational Condition PO7 in table S1.4 (page 28)

- 43. Pre-operational Condition PO7 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.
- 44. 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.

<u>Improvement Condition IC12 in table S1.3 (page 27)</u>

- 45. Improvement Condition IC12 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.
- 46. 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.
- 47. The wording used for the first aim is adapted and developed from permit conditions applied at other asbestos treatment sites (see DH2 SoC paragraphs 48 to 51) (Appendix GR14). The Agency considers this condition is fundamental to demonstrating that BAT is achieved.

Table S1.2

48. 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 considers 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.

Monitoring requirements – channelled emissions, Table S3.2 (page 49)

- 49. 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 PO7). These are:
 - For asbestos fibres a limit of 0.1 fibres/ml
 - For particulate matter (dust) a limit of 5 mg/m³
- 50. 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) (Appendix GR13). 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".

51. The limit 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.

Monitoring requirements - ambient air, table S3.11A (page 60)

52. Ambient Air Monitoring requirements have been added for asbestos fibres around the site in table S3.11A. 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 PO7. 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") (Appendix GR16).

Conclusions

- 53. As set out in discussion of permit variation reference EPR/NP3538MF/V009 above, the Agency did not consider the Appellant was taking all the appropriate preventative measures against pollution, based on the level of risk posed.
- 54. The Agency considers there is the potential for pollution from the asbestos treatment process as proposed by the Appellant. Whilst not specified by BAT, there is no safe level of asbestos within the environment. 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 and dust from the process are minimised.
- 55. With regard to permit variation reference EPR/NP3538MF/V010 I consider that the conditions applied allow the Appellant to operate an asbestos treatment process (subject to the conditions, including the pre-operational and improvement conditions outlined above) in accordance with BAT and in a way which will ensure that the storage, handling

and treatment of asbestos wastes is undertaken in a manner which does not result in a significant risk of asbestos fibres being released into the environment, either into the air or into the soil matrix. This is on the basis that there are similar sites with similar permit conditions and in line with our interpretation of BAT for the sector.

Appendices

GR01: APP/EPR/636, 651 & 652 Conjoined Rule 6 Statement on Behalf of FCC Recycling (UK) Limited and 3C Waste Limited GR02: Agency's Statement of Case for Appeal APP/EPR 2016/636 GR03: Annex to Agency's Statement of Case for Appeal APP/EPR 2016/636 Issued permit variation reference EPR/NP3538MF/V009 GR04: GR05: Decision Document for permit variation reference EPR/NP3538MF/V009 GR06: Permit number EPR/HP3632RP/V003 for Edwin Richards Quarry Soil **Treatment Centre** GR07: FCC Recycling (UK) Limited comments on the draft permit conditions for variation reference EPR/NP3538MF/V010 GR08: Issued permit variation reference EPR/NP3538MF/V010 Decision Document for permit variation reference EPR/NP3538MF/V010 GR09: GR10: Chemical Waste: appropriate measures for permitted facilities GR11: Agency document "Hazardous Waste Soil Treatment" GR12: BAT Conclusions for waste treatment ("BATCs") (EU 2018/1147) GR13: Best Available Techniques (BAT) Reference Document for Waste Treatment GR14: Agency's Statement of Case for Appeal APP/EPR 2016/651 Daneshill Soils Treatment Facility Proposed Layout Plan (drawing 3982-CAU-GR15: XX-XX-DR-1805) and Section Drawings (drawing 3982-CAU-XX-XX-DR-C-1806) (Pages 17 and 18 of Activities & Operating Techniques Report Doc: 3982-CAU-XX-XX-RP-V-0305-A0.C1) GR16: Agency's Technical Guidance Note M17 Monitoring of particulate matter in ambient air around waste facilities