

Permitting Decisions- Variation

We have decided to grant the variation for Finningley Quarry operated by Tetron Finningley LLP.

The variation number is EPR/NB3039RM/V003.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

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Purpose of this document

This decision document provides a record of the decision-making process. It:

- highlights key issues in the determination
- summarises the decision making process in the decision considerations section to show how the main relevant factors have been taken into account

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

Key issues of the decision

The current permit is a waste operation for the storage and treatment of non-hazardous wastes to produce soil, soil substitutes and aggregates. The addition of the treatment of construction waste and soils impacted by bonded asbestos and hazardous waste soils contaminated with hydrocarbons changes the permit to be an installation under Section 5.3 Part A (1)(a)(vi) and S5.6 of the Environmental Permitting Regulations (England and Wales) 2016 (“EPR 2016”).

Soil washing (Hydrocarbons) (Activity AR1)

Once washed, the potentially odour emitting compounds are contained within the wash waters. Wash waters are contained within tanks within the water system. The risk of odour from the wash water is considered very low.

Hydrocarbons in the soil are separated from the minerals by the washing process and entrained in the waters (either as free product on the surface or in dissolved forms).

As part of the pre-acceptance process, the hazardous wastes will be tested to establish base level concentrations and to compare them with output recovered materials. Activity AR1 will include testing on hydrocarbons including SVOC and VOC.

Washing of hazardous waste in Area 2 could in principal generate some diffuse sources of VOC and aromatic hydrocarbons, however this is considered to be localised around the storage bay. Diffuse VOC levels from the contaminated soils are managed through pre-acceptance. In addition, VOC levels are monitored at the edge of the storage enclosure and at downwind boundary.

A conservative action threshold will be set at 1 ppm (the benzene Work Exposure Limit) at 10 m. If VOCs are detected above 1 ppm at 10 m then the abnormal odour action plan will be implemented. The maximum storage at any one time is limited to 500 tonnes. Hazardous concrete bays are covered preventing surface water pathway with source material and potential odour risk in the sealed drainage system. We are satisfied that the odour management plan will be effective in minimising odour emissions from this activity.

Construction materials impacted with asbestos (handpicking and washing) (Activities AR2 and AR3)

Some construction materials, such as soils and stones, or bricks and ceramics can be impacted with bonded asbestos cement. Such wastes whether they would on their own be considered non-hazardous or hazardous are considered hazardous whilst the asbestos cement is present. Once the asbestos is removed, the treated waste can be considered hazardous or non-hazardous in the normal manner, , that is by assessing the hazardous substances they contain rather than due to the presence of fragments of asbestos. This makes the separation of asbestos fragments a good pre-treatment stage in the recovery of construction wastes.

Handpicking of fragments of bonded asbestos cement is a technique employed at both contaminated land sites using mobile plant and at permitted waste installations. The operation takes place in a purpose-built, enclosed picking line where asbestos cement is handpicked from the construction waste (for example soil) matrix. The asbestos is double bagged, stored in a sealed, locked skip and sent for landfill disposal. This site is permitted for treatment by handpicking of bonded asbestos fragments from construction wastes; these wastes would be non-hazardous other than that they are impacted with the asbestos fragments (see below under Waste types).

The Applicant has additionally asked to be permitted for washing asbestos-impacted waste soils. Washing of such soils is a novel treatment process. The purpose of the washing process is to separate the waste soil into three fractions - aggregate, sand and silt. The process also separates off other wastes, including metals, wood and plastics that can be transferred for further recovery. The Applicant expects all of the asbestos cement to be present only in the separated aggregate fraction. The applicant will test the waste to determine this is the case. This fraction makes up a smaller amount of waste from which handpicking will be easier.

Washing of waste may potentially create a risk that asbestos fragments break up and fibres are generated. The Applicant has indicated that there will be no such release of fibres into the soil matrix and the permit requires that this does not occur. The water in the washing system is recirculated and treated through a series of clarifiers and filters. As such there will be no discharge of asbestos fibres into the environment.

We have considered the measures proposed (including internal consultation with Environment Agency sector leads) and accept that the Applicant's proposals apply the principals of BAT for preventing and, where that is not practicable, reducing emissions and their impact on the environment.

We have implemented additional conditions (pre-operational condition and improvement condition) within the permit requiring commissioning and testing, and performance review of the plant. These further controls will be assessed by the compliance officer, and will require written approval for completion.

Waste types

The Applicant wants to handpick asbestos from construction wastes that would otherwise be non-hazardous but that they are impacted with fragments of bonded asbestos cement. These wastes are dual coded and described as:

17 01 07 and 17 06 05* mixture of concrete, brick, tiles and ceramics which are impacted 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)

17 05 04 and 17 06 05* soil and stones other than those mentioned in 17 05 03 which are impacted 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)

19 12 12 and 17 06 05* other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (soil wastes only) which are impacted 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)

19 13 02 and 17 06 05* solid wastes from soil remediation other than those mentioned in 19 13 01 which are impacted 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).

The three soil wastes described above (17 05 04, 19 12 12 and 19 13 02) are also permitted to be washed.

Wastes soil will be assessed to show that they are non-hazardous after treatment.

In Table S2.3, we have included an exclusion in the permit to ensure that “Wastes having any of the following characteristics shall not be accepted: 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).”

This will ensure that that the levels of free fibrous asbestos in the soil are low and thus should help to reduce any emissions of free fibres during the picking process. A limit of 0.01% is understood to be the low risk level for asbestos fibres in the soil matrix as detailed in the CL:AIRE Industry Guidance: Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials.

The Applicant has demonstrated that they have identified the potential risks associated with the asbestos treatment process. In order to remove the pathway to the receptor, the handpicking operations are undertaken within a building. We have included within the permit a limit for the asbestos fibres contained within the accepted soil, which will also help to reduce any potential emissions.

The Applicant has committed to ensuring all waste is dampened down during the storage and treatment process and that air testing during the handpicking works is undertaken as an additional protection measure. They have also demonstrated they have an appropriate monitoring and sampling procedure in place pre and post treatment to ensure reliable waste acceptance and validation of waste treatment. We are therefore satisfied that the Operator has appropriately demonstrated they will implement BAT.

Treatment of soils impacted by bonded asbestos

The operator will follow a strict waste pre-acceptance and acceptance criteria detailed in their Asbestos Management Plan. Only soils impacted with bonded asbestos will be treated. The treatment involves either handpicking of asbestos from the relevant construction waste using an enclosed picking station or washing soil wastes to isolate the asbestos. The wastes permitted for this treatment are listed in Table S2.3 of the permit. The waste will be processed in four different areas of the site, Areas 1 to 4 as illustrated in schedule 7 site plan. Area 3 is designated as the asbestos treatment area and we consider this to be the highest risk activity – based on the potential release of asbestos fibres.

All the activities involving asbestos are detailed within the Asbestos Management Plan and the operators Technical Standards & Operational Management plan. Both listed as part of the sites operating techniques listed in Table S1.2 Operating Techniques of the permit.

Prior to any acceptance of waste containing asbestos, a detailed assessment will be completed and documented in line with the standard procedures. This will include:

- The process producing the waste;
- The quantity of the waste;
- The % ACM fibre by type (i.e. chrysotile, crocidolite, amosite) within the waste matrix;
- The % ACM fragments (limited to bonded only) within the waste matrix;
- Fibres and fibre bundles (i.e. not fragments) is limited to <0.1% chrysotile fibre w/w and other forms or mixed forms is <0.01% w/w;
- Chemical analysis of the waste (if applicable), no other hazardous properties are present other than asbestos fragments, subject to WM3 assessment;
- The solid matrix type (i.e. homogenous granular, homogenous cohesive, or heterogeneous);
- Any specific handling requirements (other than asbestos related). This includes all delivery plant being fully sheeted;
- If 19 12 12 & 17 06 05*, the waste producer must confirm whether it has been through a trommel process and what the origin of the waste has come from. It will be rejected if it is from mixed waste household sources and if it has been through a trommel process;
- In terms of throughput, the treatment area can handle up to a maximum of 200 tonnes per day and storage of 250 tonnes;

Any unacceptable hazardous material will be transferred to the quarantine area for offsite disposal or recovery. The Operator has confirmed that their waste acceptance and pre-acceptance procedures comply with indicative BAT requirements for pre-acceptance as detailed in section 2.1.1 and acceptance as detailed in section 2.1.2 of Sector Guidance Note IPPC S5.06.

Prior to picking, the soils will be stored within marked bays inside the designated building.

The process will involve handpicking of identifiable fragments of bonded asbestos. All treatment of asbestos will be undertaken in a negative air pressure environment. Picking will be undertaken in its own enclosure with standalone negative air system. This is considered to meet BAT if carried out in an enclosed building with adequate ventilation and monitoring.

Asbestos and PM10 Emissions

The building is fitted with an air management system retaining a negative pressure. The risk of release of asbestos fibres will be minimal as the building is air tight and fitted with automated roller shutter doors. Dampening down procedures are in place to minimise dust and asbestos fibre emissions. All extracted air is filtered through a bag filter before release to air. The bag filter will be fitted with High Efficiency Particulate Air (HEPA) filters. The filters will be inspected and changed in accordance with the manufacturers recommendations.

To ensure these measures are effective we have implemented a point source emission (table S3.1) with limits of 0.1 fibre/ml for asbestos and 5 mg/m³ for particulate matter. We have applied monitoring requirements to the permit to demonstrate compliance with these limits:-

- Asbestos monitoring. This will allow efficiency to be measured.
- Dust (PM10) once every six months by a third party consultant. Any detection above this limit and response procedure will be initiated.

We have also implemented process monitoring (table S3.3) in the form of quantitative asbestos reassurance monitoring. This will be undertaken at six locations, three upwind and three downwind of Area 3 on a daily basis when asbestos treatment operations are undertaken. This includes static monitoring within 20m downwind of Area 3. The asbestos monitoring locations are shown in the site plan in schedule 7 of the permit. The monitoring and trigger threshold will be in accordance with Environment Agency M17 guidance. Full details of emissions can be found within the particulates management plan.

Decision considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made.

Identifying confidential information

We have identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The comments and our responses are summarised in the [consultation responses](#) section. The application was publicised on the GOV.UK website.

We consulted the following organisations:

- Public Health England
- Local Environmental Health
- Local Planning Authority
- Health and Safety Executive

The comments and our responses are summarised in the [consultation responses](#) section.

The regulated facility

We considered the extent and nature of the facility at the site in accordance with Appendix 2 of RGN2 “Defining the scope of the installation”.

The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.

The site

The operator has provided a plan which we consider to be satisfactory.

This shows the extent of the site of the facility including the discharge points.

The plan shows the location of the part of the installation to which this permit applies on that site.

The plan is included in the permit.

Site condition report

The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports.

Nature conservation, landscape, heritage and protected species and habitat designations

Screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

Environmental risk

We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory.

General operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

Odour management

We consider that the odour management plan is satisfactory and we approve this plan.

We have approved the odour management plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The applicant should keep the plans under constant review and revise them annually or if necessary sooner if there have been complaints arising from operations on site or if circumstances change. This is in accordance with our guidance 'Control and monitor emissions for your environmental permit'.

The plan has been incorporated into the operating techniques S1.2.

Noise and vibration management

We have reviewed the noise and vibration management plan in accordance with our guidance on noise assessment and control.

We consider that the noise and vibration management plan is satisfactory and we approve this plan.

We have approved the noise and vibration management plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The applicant should keep the plans under constant review and revise them annually or if necessary sooner if there have been complaints arising from operations on site or if circumstances change. This is in accordance with our guidance 'Control and monitor emissions for your environmental permit'.

The plan has been incorporated into the operating techniques S1.2.

Fire prevention plan

We have assessed the fire prevention plan and are satisfied that it meets the measures and objectives set out in the Fire Prevention Plan guidance.

The plan sets out alternative measures that we consider meet the objectives of the Fire Prevention Plan guidance.

We have approved the fire prevention plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The plan has been incorporated into the operating techniques Table S1.2.

Dust management

We have reviewed the dust and emission management plan in accordance with our guidance on emissions management plans for dust.

We consider that the dust and emission management plan is satisfactory and we approve this plan.

We have approved the dust and emission management plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The applicant should keep the plans under constant review and revise them annually or if necessary sooner if there have been complaints arising from operations on site or if circumstances change. This is in accordance with our guidance 'Control and monitor emissions for your environmental permit'.

The plan has been incorporated into the operating techniques S1.2.

Waste types

We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.

We are satisfied that the operator can accept these wastes for the following reasons:

- they are suitable for the proposed activities

- the proposed infrastructure is appropriate; and
- the environmental risk assessment is acceptable.

Wastes having any of the following characteristics shall not be accepted:

- 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).

We made these decisions with respect to waste types in accordance with WM3 Guidance.

Pre-operational conditions

Based on the information in the application, we consider that we need to include the following two pre-operational conditions for activities AR2 and AR3 Asbestos treatment. These are

- *At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall provide a written commissioning plan (including timescales for completion) for approval by the Environment Agency. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the measures to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved by the Environment Agency. No site operations shall commence or waste accepted at the installation unless the Environment Agency has given prior written permission under this condition.*
- At least 4 weeks (or any other date as agreed with the Environment Agency) prior to commissioning of the installation, the operator shall provide a written report on the air extraction system for the installation for approval by the Environment Agency. The report shall include the following:
 - an assessment of the building fabric for potential fugitive emission routes to air, and any actions taken to rectify the potential routes.
 - an assessment of the air extraction system demonstrating that the building is under effective negative pressure and that all air extracted is emitted via the air filtration system. No site operations shall commence or waste accepted at the installation unless the Environment Agency has given prior written permission under this condition.
- The purpose of this pre-operational condition is to set appropriate controls to ensure any potential asbestos fibre release will not cause pollution or harm to human health and appropriate monitoring, maintenance and management procedures will be set.

Improvement programme

The Operator shall submit a written report to the Environment Agency on the commissioning of the installation. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the application. The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.

The operator shall provide a report on the monitoring undertaken as part of the sampling of the incoming waste, the separated wastes streams, and recirculated water from the operation of the asbestos washing process as set out in the Asbestos Management Plan ref over the first 4 months of operation, for approval by the Environment Agency.

The sampling report shall:

- detail the method(s) used to sample and analyse the treated waste streams and water for asbestos fibres;
- demonstrate a high percentile level of confidence in the treatment process taking account of the amount of waste treated per batch and the number of samples required to adequately sample each waste stream, and the recirculated water, both initially and on an ongoing basis;
- demonstrate that additional asbestos fibre contamination is not being created by the wash process.
- recommend any additional measures to be undertaken to ensure compliance with the permit conditions.

The notification requirements of condition 2.6.2 will be deemed to have been complied with on submission of the plan.

Emission limits

Emission Limit Values (ELVs) and equivalent parameters or technical measures based on Best Available Techniques (BAT) have been added for the following substances

- Particulate Matter
- Asbestos Fibres

See Key Issues Section

Monitoring

We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified:

- Asbestos fibres

- Particulate Matter

The emission point reference and location in Table S3.1.

The emission point reference in Table S3.3 for asbestos fibres for the pre-operational condition.

These monitoring requirements have been included in order to reflect the updated drainage plan, the pre-operational condition and additional requirement for outside sampling for asbestos fibres.

We made these decisions in accordance with M17 Monitoring Guidance.

Based on the information in the application we are satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.

Reporting

We have added reporting in the permit for the following parameters:

- Asbestos fibres
- Particulate Matter

We made these decisions in accordance with M17 Monitoring Guidance.

Management system

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

Technical competence

Technical competence is required for activities permitted.

The operator is a member of the CIWM/WAMITAB scheme.

We are satisfied that the operator is technically competent.

We have assessed operator competence. There is no known reason to consider the applicant will not comply with the permit conditions.

Previous performance

We have assessed operator competence. There is no known reason to consider the applicant will not comply with permit conditions.

Growth duty

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit variation.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Consultation Responses

The following summarises the responses to consultation with other organisations, and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section

There were no comments made by the following

- Local Environmental Health
- Health and Safety Executive

Response received from **Doncaster Metropolitan Borough Council Planning Authority -28/05/2021**

Brief summary of issues raised:

The response referred to a landfill variation application permit Ref EPR/JB3002LB/V003 submitted by the same applicant. This landfill site is adjacent but not part of this facility.

Summary of actions taken:

Advised that this is a different application and passed the comments on to the relevant permitting officer. The applicant was also given the contact details of the planning department.

Response received from **Public Health England -14/01/2022**

Brief summary of issues raised:

Based on the information contained in the application provided, UKHSA has no significant concerns regarding the risk to the health of the local population from the installation.

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.

Summary of actions taken:

None required

Representations from individual members of the public

1 The proposal is to treat more than 30,000 tonnes per year of hazardous waste and that this exceeds the threshold for nationally significant infrastructure in the hazardous waste sector as stated in planning act 2008.

1 Summary of actions taken:

The Local Planning Authority was consulted on the application and raised no concerns. It is up to the Applicant to ensure they have all appropriate permissions in place.

2 An issue was raised about residential locations downwind of site. The asbestos criteria of 0.01 f/ml is questioned as being inadequate and only fit for staff in PPE, Could pose long term risks to residents, not in accordance WHO Guidelines.

Issue regarding the emission limit 0.01 F/ml set downwind of plant not compliant with WHO AQS, as residential receptors downwind of plant. This limit used for occupational health exposure within buildings and not ES, not suitable for air quality?

2 Summary of actions taken:

All asbestos treatment takes place with an enclosed and abated building as already described. Wastes are kept wetted before treatment and so not likely to produce

airborne asbestos fibres. Only bonded asbestos is accepted for treatment as described above. The nearest residential receptors are approximately 550 m North of site.

All extracted air is filtered through a bag filter before release to the air. The bag filter will be fitted with High Efficiency Particulate Air (HEPA) filters.

The limit 0.01 F/ml set downwind of plant is for total fibres, not asbestos, and is set as a check for fugitive emissions from the process. This is similar to the approach taken at landfills which accept asbestos for disposal and other sites treating asbestos.

All waste is stored and treated within an enclosed building fitted with negative pressure and appropriate abatement equipment. Asbestos waste will only be received into a dedicated asbestos waste reception Waste and will be wetted to prevent the release of dust. We consider that the applicant is applying BAT for the treatment of asbestos impacted soils.

Only asbestos in bonded form is permitted for treatment. Limits on asbestos in unbound fibrous form (free chrysotile fibrous asbestos must be below <0.1% w/w. other forms or mixed forms of fibrous asbestos must be below <0.01% w/w) have been applied.

Periodic monitoring for asbestos fibres from the abatement system and as fugitive emissions around the site have been imposed in the permit. See Process monitoring in the permit, schedule 3, table 3.3.

3 Reference was made to a Table 11b. Importation standards (inorganics).

3 Summary of actions taken

Could not find this table in the application. Not relevant to this permit maybe referring to the landfill application which the applicants have submitted at nearby location.

4 Comment that unbound asbestos is proposed for treatment at the site. Acceptance criteria limits for asbestos types in soils are absent and are a key issue for ensuring compliance with emissions thresholds. Whilst asbestos fibre limits are proposed as part of the initial acceptance criteria, the acceptance of unlimited forms of unbound asbestos will mean that asbestos fibre concentrations will increase in soil during the screening process and ultimately pose an increased risk to human health.

4 Summary of actions taken

The operator has amended their proposal wastes to remove asbestos in unbound form. The list of waste accepted at the facility is listed in the permit, schedule 2, and table S2.3.

Table S2.3 Permitted waste types and quantities for AR2 & AR3 - Asbestos Treatment	
Maximum quantity	The total quantity of wastes accepted at the site shall not exceed 375,000 tonnes per year. No more than 50,000 tonnes of waste shall be accepted for activities AR2 and AR3 in total.
Exclusions	Wastes having any of the following characteristics shall not be accepted: 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)
Waste code	Description
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 01 07 and 17 06 05*	mixture of concrete, brick, tiles and ceramics which are impacted 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)
17 05 04 and 17 06 05*	soil and stones other than those mentioned in 17 05 03 which are impacted 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)
19 12 12 & 17 06 05*	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (soil wastes only) which are impacted 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)
19 13 02 & 17 06 05*	solid wastes from soil remediation other than those mentioned in 19 13 01 which are impacted 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)

Only bonded asbestos is permitted for treatment. Limits on asbestos in unbound fibrous form (free chrysotile fibrous asbestos must be below <0.1% w/w. other forms or mixed forms of fibrous asbestos must be below <0.01% w/w) have been applied.

Periodic monitoring for asbestos fibres from the abatement system and as fugitive emissions around the site have been imposed in the permit. We consider that the techniques proposed are only suitable for dealing with asbestos in cement bonded form, and have imposed limits on asbestos in unbound fibrous form (free chrysotile fibrous asbestos must be below <0.1% w/w. other forms or mixed forms of fibrous asbestos must be below <0.01% w/w). No screening of asbestos impacted waste is permitted.

5 Concerns were raised regarding working methods to ensure compliance with HSE works and working methods to ensure compliance with HSE works classification and to ensure that there is the correct frequency of asbestos monitoring and appropriate limits are applied within working areas and boundary monitoring locations.

5 Summary of actions taken:

The HSE were consulted on the variation and did not respond. All operatives and staff will wear full PPE and RP. Asbestos monitoring has been imposed in the permit to ensure fibres are not released to the environment. Only bonded asbestos is being permitted as described in application.

6 Concerns regarding mitigation of airborne asbestos within the building and suppression methods, due to lack of detail in the application.

6 Summary of actions taken:

Asbestos waste will be received into a dedicated asbestos waste reception area, which is fitted with negative pressure and appropriate abatement equipment. Waste will be dampened down to prevent the release of fibres/dust. The picking line is a self-contained unit within the wider negative air enclosure and has its own air management system.

The air is managed in accordance with the ARCA and HSE Guidance. Eight building volumes of air will be extracted by fans. The air is extracted through High Efficiency Particulate Air (HEPA) filters. Negative pressure ensures no fugitive emissions from the facility.

The final design of the air extraction system is with a third party and will be progressed once the permit is approved.

We have included a Pre-operation conditions into the permit that will require a written report on the air extraction system. The report shall include the following:

- an assessment of the building fabric for potential fugitive emission routes to air, and any actions taken to rectify the potential routes. an assessment of the air extraction system demonstrating that the building is under effective negative pressure and that all air extracted is emitted via the air filtration system.

No site operations shall commence or waste accepted at the installation unless the Environment Agency has given prior written permission under this condition. We consider they are applying BAT

7 No hydrocarbon emissions or odour emissions VOC. Odour emissions VOC releases not considered from screening of HC contaminated soils.

Surely a mitigation approach will be required. BAT for hydrocarbon treatment in soils normally requires the system to achieve a point source emission for monitoring and/or mitigation e.g. biofilter from a bio-treatment vacuum extraction system. fugitive emissions are proposed and there are no provisions for mitigation It is also unusual to see screening of hazardous hydrocarbon impacted soil in the open air with no potential for mitigation of emissions or emissions control.

7 Summary of actions taken:

Odorous emissions relating to hydrocarbon impacted soils relate to VOC range concentrations (C5 to C10). The operator has set pre-acceptance limits of 500 mg/kg on the C5 to C10 TPH fraction that will minimise risk of odour.

The applicant has included hydrocarbon emissions (VOCs) in his risk assessment doc Ref 193433-H1ERA. A conservative action threshold will be set at 1 ppm (the benzene Work Exposure Limit) at 10 m. If VOCs are detected above 1 ppm at 10 m then the abnormal odour action plan will be implemented.

In the event that a substantiated complaint is received from a nearby sensitive site, the complainer will be contacted by Operators Site Manager or delegated party within 1 working shift to update them on the controls being implemented to remedy the situation. If substantiated, the Environment Agency will be notified. A biofilter is not appropriate as this is physical treatment.

Recording any complaints, VOC monitoring and implementing controls, as outlined in the Operational Plan and Technical Standard (TOP) and an Odour Management Plan.

Hydrocarbon impacted wastes will be stored under three-sided enclosure on a sealed drainage system. Stockpiles in bays will have at least 0.5 m freeboard to prevent wind entrainment at the top of stockpiles. Stockpiles will be covered during storage

There is an approved Odour Management Plan (OMP) in place and listed in the permit under Table S1.2 operating techniques. The soil washing process should inhibit any odour. BAT is to periodically monitoring for odour emissions.

8 Concerns raised regarding the construction of the new hard standing, impermeable liners, and lagoon.

8 Summary of actions taken:

The lagoon has an impermeable membrane and is lined with clay permeability 1×10^{-9} m/s in line with series 600 of SHW. The applicant's site condition report which included a site drainage report was assessed and deemed satisfactory.

We have included an improvement programme in the permit condition in Table S1.3. This will require operator to submit a report that will summarise the environmental performance of the plant as installed against the design parameters set out in the Application.

The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.

9 Decontamination measures for all soil screening/soil washing equipment needs to be proposed for after treatment of hazardous waste to prevent cross contamination of non-hazardous wastes that may require treatment afterwards.

9 Summary of actions taken:

Maintenance requirements for the plant are to be detailed in the maintenance plan for the plant which forms part of the management system and is required under the factory operating protocols. This primarily details the inspection and maintenance regime to be implemented. The washing system is inspected daily but specifically inspected and cleaned (as determined necessary) following the batch processing of hazardous waste. Each stage, from the hopper, conveyors, screens, process waters and filters are inspected and typically wiped clean of any contamination. This includes an assessment and cleaning as determined necessary of the process water quality, screens and the filters. Processing only starts on non-hazardous wastes when the inspection regime and adequate cleaning has been completed.

10 Comment that there is no point source emission in permit.

10 Summary of actions taken:

The air extraction system on the asbestos treatment building will have a point source emission (A1 on site plan in schedule 7 of the permit) to atmosphere. All extracted air will be filtered through a bag filter before release. The bag filter will be fitted with High Efficiency Particulate Air (HEPA) filters. The filters will be inspected and changed in accordance with the manufacturer's recommendations. The emission point will be monitored for asbestos fibres and for dust (PM10) every six months. Emission limits are set in the permit (table S3.1).

11 Comment that there are no proposals for disposal of filter cake to appropriate facility from the washing of hydrocarbon impacted soils.

11 Summary of actions taken:

The filter cake, where hydrocarbons are to be retained, will be stockpiled separately until its properties can be determined. TSOMP 6.2 states "materials that cannot be reused will be sent for disposal."

12 It is unknown how the soil washing will recover 90-98% of materials when even in the most granular soils there is normally 10-15% of >63µm particles that will be removed as a filter cake.

12 Summary of actions taken:

The process is described in the Asbestos management plan in Table 2 which forms part of the permits operating techniques table S1.2 this is not a matter for the permit determination

13 Concerns raised regarding wet screening and ability to remove soils enabling the efficiency of picking to be improved. It also acts to remove fibres from the soil matrix making them more likely to be able to be recovered. How is this actually demonstrated by the applicant with real data, it is of concern that there are references to technologies such as vitrification of asbestos by the applicant.

13 Summary of actions taken:

The operator has reported to us that washing of asbestos impacted soil has been undertaken on a remedial site in 2019. Extensive testing was completed on the finer fractions. No trial has been specifically undertaken on the process as described, however the system technology is informed from this experience.

14 Table 3.3. In the BAT document states that materials >75mm will be screened from hazardous soils and crushed. The materials >75mm screened out of the hazardous waste stockpile will remain as hazardous waste and there appears to be no form of management provision to prevent this being crushed with non-hazardous oversize material, what provisions will prevent this and what is the fate of the crushed hazardous oversize material? What mitigation of hydrocarbon emissions are employed during this process? The sampling frequency proposed by the applicant is so inadequate and not respecting the minimum frequencies for heterogeneous waste types in accordance with EA guidance.

14 Summary of actions taken:

Asbestos contaminated materials will not be pre-treated. Oversized materials removed, not screened from hydrocarbon contaminated wastes will need to be assessed as hazardous/non-hazardous waste. The TSOMP identifies that unacceptable oversized material will be quarantined, or transferred to skip for off-site transfer:

15 Section 3.34 states that a wastes produced from this process is 19 02 06 without evidence it is not 19 02 05* which is more appropriate code, possible mis-describes waste to save money.

15 Summary of actions taken:

Treated wastes will be assessed as hazardous or non-hazardous waste. The Operators TSOPM states that the waste generated will be either 19 02 06* or 19 02 05.

The process separates the silt and clay materials, which as described in Table 3.3 are initially entrained in water system and then settled forming a slurry. These materials are then pressed. The residual silt/clay fraction is then stockpiled on site. It is recognised that dependent upon inputs there is the potential for some contamination to be retained in the silt/clay fraction.

Subsequently this material is treated as a waste product unless data and assessment can demonstrate that it can be used without significant risk to the environment. The material will be classified as EWC 19 02 06 (sludges from physico/chemical treatment other than those mentioned in 19 02 05). The operator has to comply with the hazardous waste regulations.

Permit condition 2.3.5 states;

The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

- (a) the nature of the process producing the waste;
- (b) the composition of the waste;
- (c) the handling requirements of the waste;
- (d) the hazardous property associated with the waste, if applicable; and
- (e) the waste code of the waste.

16 Table 3.4 in the TSOMP, doesn't meet standards in EA guidance for level 1 testing suggests it should meet standards of as outlined in Environment Agency guidance for level 1 testing.

The made ground inputs are heterogeneous wastes from multiple sources and cannot be treated as a regular waste stream from a single source. It should therefore meet the sampling frequency requirements for heterogeneous waste as per the EA guidance (<https://www.gov.uk/guidance/dispose-of-waste-to-landfill#basic-characterisation>).

16 Summary of actions taken:

Table level 1 - see table in TSOMP section 3.35 Environmental testing

The treated waste is destined for recovery and not landfill therefore level 1 testing is not appropriate. The treated waste does however need to be assessed to identify if it is hazardous or non-hazardous.

17 Asbestos awareness training alone is completely inadequate for implementing this operation in accordance with HSE guidance. Asbestos awareness does not cover the use of PPE, decontamination provisions or negative pressure enclosures that are key aspects of this permit application.

17 Summary of actions taken:

Only bonded asbestos is being accepted at the site. This is a Health and Safety issue. We have consulted with HSE and received no comments back. There is no reason we can see that the operator will not provide training and adequate PPE.

18. Asbestos fragments in clay soils will not be accepted at the facility – this clearly should be a permit condition.

18 Summary of actions taken:

Only bonded asbestos is allowed to be accepted, it is up to the operator to fully treat wastes. Anything unsuitable for treatment will have to go for disposal.

19 The waste at the acceptance stage will be sampled and tested twice per month. (According to AMP site waste acceptance section 3.5) to enable an assessment to be made on treatment performance. It is not clear what the aim of this is for?

19 Summary of actions taken:

This is a reference to asbestos impacted non-hazardous waste. Acceptance checks are required to ensure the waste is as expected following the pre-acceptance information.

In the Technical Standard & Operational Management Plan it states:

The operator will have the facility to check the waste on arrival. Only waste that conforms to the type and description in the documentation supplied by the producer and/or holder will be accepted.

Acceptance sampling must be undertaken in accordance with our Chemical Waste: appropriate measures for permitted facilities guidance. The applicant has provided a sampling protocol and we will monitor this during compliance.

20 Concerns raised over operator's experience of working with asbestos.

20 Summary of actions taken:

The operator has satisfied our tests for fit and proper persons and have the relevant accreditation WAMTAB qualification. An Environmental Management System (EMS) is

in place for the site and the operator will have to operate the site in accordance with the conditions of the permit.