

Permitting Decisions- Variation

We have decided to grant the variation for Daneshill Landfill operated by FCC Recycling (UK) Limited.

The variation number is EPR/NP3538MF/V009.

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 <u>decision considerations</u> section to show how the main relevant factors have been taken into account
- summarises the engagement carried out because this is a site of high public interest
- shows how we have considered the consultation responses

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.

In reaching our decision, we consider 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.

Description of activities

The variation is for a soil treatment facility (STF) located within the existing permitted landfill boundary situated at Daneshill Landfill, Lound, Nottinghamshire, DN22 8RB.

The STF will accept and treat up to 29,999 tonnes per annum of hazardous waste and 20,001 tonnes of non-hazardous waste by bioremediation. Once treated the wastes will be tested for suitability for use in the wider landfill restoration.

All storage and treatment operations will take place on impermeable pads with sealed drainage.

The bioremediation process exploits the ability of natural soil microbial populations such as bacteria and fungi to biodegrade organic pollutants such as petroleum hydrocarbons, polycyclic aromatic hydrocarbons, creosote, chlorinated solvents, Phenols and other volatile organic compounds (VOCs) into less harmful substances such as carbon dioxide and water vapour.

The site will only accept waste for treatment that can be treated to a point where they can be used in the final restoration of the landfill. Most wastes subject to bioremediation will be hazardous however where necessary to meet reuse thresholds non-hazardous soils similar to the mirror hazardous wastes will also be treated separately by bioremediation.

Once accepted at the site, the contaminated soils will be transferred to the treatment area and arranged into bio-piles approximately 4m high over perforated aeration pipes. The treatment surface consists of a geosynthetic clay lined pad with sand, crushed concrete and drainage infrastructure which drains to a collection pit before pumping to the on-site water treatment system.

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

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

The bioremediation process includes controls on gaseous and aqueous emissions (see key issues section for more information)

Screening

Mechanical screening of non-hazardous treated soils from the bioremediation area will be undertaken using a two way screen to meet the physical criteria for restoration soils. There will be no screening of hydrocarbon contaminated soils prior to bioremediation.

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.

Key issues of the decision

Waste pre-acceptance and acceptance

The operator has confirmed that their waste pre-acceptance and acceptance procedures comply with BAT requirements as detailed in BAT 2 (Best Available Techniques BAT Conclusions for waste treatment Aug 2018). Following an initial enquiry from a customer the sites Technical Manager will carry out a full technical assessment which will include:

- The source and origin of the waste.
- Information on the process producing the waste
- The appearance if the waste
- Data on its composition and levels of contamination.

A set of terms and conditions for acceptance are sent to the waste producer including a statement of waste characterisation samples considered unsuitable for treatment including:

- Maximum contaminant concentrations for reuse in the restoration area or disposal within the landfill.
- Limitations on physical and chemical characteristics (particle size, pH, moisture.
- Statement from the producer confirming the soils are fee of tars, oils spills above treatability threshold, invasive species and high moisture content.

Once accepted the waste will be allocated a tipping reference and waste booked for acceptance. All vehicles bringing waste will pass over the weighbridge where the paperwork for each load will be inspected. Drivers will then be directed to the appropriate treatment pad.

The waste is visually inspected during unloading and if approved soils will be moved into stockpiles for reception sampling in line with BS812 – Testing Aggregates Part 1: Methods of Determination of Particle Size and Shape, at a frequency of at least one job (less than 50m³). Assessment will also confirm the waste contains biologically treatable substances with the range for contaminants based on pre-acceptance information. All analysis will be undertaken by an accredited United Kingdom Accreditation Scheme (UKAS) or a Monitoring Certification Scheme (MCERTS) accredited laboratory.

If insufficient information is provided to adequately characterise the waste to determine its suitability for treatment the operator will undertake pre-acceptance testing at the source site to establish an initial waste description.

No waste will be accepted unless it has been pre booked with the site manager details providing the source and approval number which is designated at the pre-acceptance stage. Waste will be weighed and assigned a tipping reference before deposit into the quarantine area.

Any non-confirming waste will be rejected.

Soils designated for bioremediation will be arranged into bio-piles using a system of batches which allow the waste to be trackable by age of waste and from the point of origin to its location on the treatment pad.

Wastes will be tested post treatment. Any non-conforming wastes will be transferred back for further treatment or disposed of.

Control of emissions from the bioremediation

The bio-piles have several operational controls which allow the control of gaseous and aqueous emissions:

Surface water management

The treatment pads are bunded and gravity drained to keep the process water separate from uncontaminated surface water runoff from non-waste handling areas of the site. Process water will collect in downgradient sumps and transferred to the on-site water treatment system.

The system comprises:

- A 50m³ settlement tank with transfer pump and level detectors.
- Oil water separator/settlement tank with transfer pump and level detectors.
- Sand filter.
- Granulated activated carbon filter.

Water is transferred to the treatment system using a pump with integral level detection sensors from the collection sumps to the water storage tanks. The pumping system controls all the transfer pumps and level sensors protect from overfilling. The whole water treatment system is bunded which also provides over pumping protection. Pipework connecting the pumping chamber to the primary collection tank will be HDPE pipework connected by butt fusion. The pipework will be commissioned and pressure tested prior to operation to ensure that no leaks are present.

Effluent from the treatment system will be stored within a tank prior to testing and reuse within the treatment process or removed from site. There are no discharges of process waters on site.

Surface waters arising from the non-operational areas of the site flow towards the existing "SW lagoon" close to the site entrance which then discharges to the ditch on the western perimeter of the landfill which is monitored under the permit at SW04 and is an authorised discharge point for the site.

Air emissions

Abatement of air emissions will consist of an air extraction system which will draw air through the bio-piles and on to a biofilter before being discharged to atmosphere.

The air extraction system consists of a network of perforated pipes to distribute air flow. They will be installed beneath the bio-piles and will be linked by a main collection system to a vacuum blower. An air/water separator is fitted within the collection system to remove liquid from the process air extracted from the bio-pile. The process water is pumped from the separators via an automated pump with level detection system to the treatment system described above. The air fraction is then pumped through a treatment module and exhausted via the biofilter.

The biofilter is comprised of compost European Waste Catalogue (EWC) 19 05 03 Off Specification Compost produced at the operator's composting facilities. The material is hydrated and ammonium nitrate is added to increase the available nitrogen to approximately 100mg/kg to ensure that the medium is supportive of microbial proliferation once there are effluent gases passing through the biofilter. It will then be sampled to ensure operational parameters are within optimal range and covered with a tarpaulin to retain its moisture content and reduce the potential for any particulate and odour emissions.

The filter's function is to treat exhaust gases, removing Volatile Organic Compounds (VOC's), Total Petroleum Hydrocarbons (TPHs), Polycyclic Aromatic Hydrocarbons (PAHs), and BTEX (benzene, toluene, ethylbenzene and xylene) via microbial action.

In order to maintain a moisture film on the matrix of the biofilter, recirculating process water may be pumped periodically onto the surface. Process monitoring of the biofilter is required within the permit to ensure the optimum conditions for operations are maintained.

We have included an Improvement Condition 11 within the permit requiring the operator to carry out a review of the waste filter media using emissions data collected within the first year of operations to demonstrate the filter is effective.

Fugitive emissions of dust

There is the potential for the STF to produce dust. The operator has submitted an Emissions Management Plan. The plan identifies potential sources of dust, sensitive receptors and considers pathways for impact.

The operator has identified the following operations likely to generate the greatest potential for impact. These include:

- Waste delivery and reception
- Haulage routes within the site
- Deposition into treatment areas
- Bioremediation including initial placement and turning
- Post treatment screening
- Storage and transfer of oversize materials

Soil movements will be kept to a minimum. Once soils are formed into bio-piles the sides are sealed with an excavator bucket with turning undertaken every 3-4 weeks for decompaction reasons. The bio-piles can also be irrigated should surface dust be observed.

In addition to this the operator has committed to operating techniques including good housekeeping and cleaning procedures to ensure the potential for dust generation is kept to a minimum. The following measures are proposed:

- Vehicles delivering to site will be covered
- On site speed limit
- Bowsers and spray rails as used in the adjacent landfill for damping down haulage routes
- Reduced drop heights
- All vehicles will use the on-site wheel wash
- Road sweeping undertaken
- Dust suppression system in place using mains water only.

We agree that these measures constitute BAT for the facility.

Odour and Air Quality Impact Assessment

Soils accepted for treatment can potentially contain odorous organic substances due to the presence of hydrocarbons. The operator has submitted an odour management plan with their application. A separate air quality impact assessment was also submitted to consider the air quality impacts on human health from VOC's.

The operator has identified the following activities as potential odour sources:

- Soil delivery and initial waste acceptance.
- Bioremediation including bio-pile formation, aeration and turning.
- Emissions from biofilter and treatment of surface waters.
- Screening and handpicking of soils.
- Storage and transfer of residual material removed from the screening process.

The management of the bio-piles and maintenance of optimum temperature, oxygen, moisture, and pH is essential for the minimisation of odour potential. These parameters are monitored and amended as detailed elsewhere. The operator has set out the following measures to prevent emissions:

- Waste acceptance procedures no waste will be accepted at site unless it has been pre-booked and details of source, physical and chemical composition and hazardous status have been provided.
- Onsite inspection procedures ensuring malodourous wastes are rejected or accepted only if arrangements are in place to treat the waste in a way that will minimise odours.
- Drop heights will be reduced during loading and unloading to minimise agitation of waste.
- Soils can be covered with tarpaulin, woodchip or non-odorous soils if required.
- Soils are formed on an air extraction system that draws vapours through the biofilter. This maintains a vacuum under the stockpiled soils drawing air towards the biofilter. Biofilter flow rates can be adjusted to increase the retention time if there is odour potential at the biofilter during soil turnover.
- Soil decompaction results in the opening of 3m wide sections of the biopile at any one time that will be sealed at the end of each working day.
- Soil screening will only be undertaken on soils which have been characterised to ensure no odour is present and will only be undertaken on soils post bioremediation if necessary to meet soil reuse criteria.

We consider these measures constitute BAT for the installation.

Air Quality Assessment

The use of a bio-filter is considered a Best Available Technique. The operator however proposes to use the waste materials EWC 19 05 03 Off specification compost derived from their composting facilities as a filter medium. We have therefore considered the operator's Air Quality Assessment which was submitted in support of the use of waste material.

The operator submitted an Air Quality Assessment which considers the air quality impacts from the facility on human health. The main pollutants of concern are Benzene, Toluene, Ethylbenzene and Xylene. The assessment is based on the assumption that the contaminants in the soils will be similar in character to those tested at a similar site for which 18 months of monitoring data has been supplied.

The operator modelled their emissions using ADMS 5.2 to predict how emissions will be dispersed.

The modelling confirmed impacts from Benzene, Toluene, Xylene and Ethylbenzene are low risk when comparing modelled PCs against environmental standards.

Noise and vibration

Noise pollution beyond the site boundary is considered unlikely due to the distance to nearby receptors. The operator however has confirmed the following mitigation measures associated with operations on site:

- Maintenance of mobile plant/machinery and equipment fitted with silencers and acoustic hoods
- Vacuum extraction blowers and pumps are housed in acoustic enclosures
- Avoid unnecessary revving and idling of engines
- Use of broadband type noise reversing alarms (not beepers)
- Minimise drop heights.

Storage, containment and drainage

All storage and treatment operations are undertaken on three specially constructed pads with impermeable surfacing and drainage with waters pumped to holding tanks prior to treatment.

Asbestos Waste

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

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

- Segregated storage and processing area for asbestos contaminated soils.
- Stockpiles covered with tarpaulins.
- Asbestos contaminated soils to be screened using a three-way screener.
 The screener and conveyers of the screener will be covered and linked to a HEPA filter. Monitoring to be undertaken at the filter.
- Post screening soils to travel along an input conveyer with spray rail to a covered picking station, visible fragments of asbestos to be hand-picked and placed in polythene bags prior to deposit within locked skips.
- Dust suppression to be in place to dampen stockpiles and during loading and unloading activities.

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

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

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

In accordance with the Industrial Emissions Directive, BAT is to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it. We do not consider that the proposed operating techniques for the storage, handling and treatment of asbestos waste represent BAT. We consider that the storage, handling and treatment of asbestos wastes in the manner proposed increase the risk of airborne fibres being released into the environment. The proposed method of treatment is not considered to be acceptable and the operator has not provided justification that there are benefits from the proposed treatment which would outweigh the risks.

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

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

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

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

Decision considerations

Confidential information

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

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

Identifying confidential information

We have not 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.

We consulted the local authority.

No response was received.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

- Director of Public Health and Public Health England
- Health and Safety Executive

The comments and our responses are summarised in the <u>consultation responses</u> section.

The regulated facility

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1'

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.

These show the extent of the site of the facility [including the emission points].

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.

The facility lies within the boundary of the existing landfill. The operator however provided a description of the site.

The area of the STW was previously used as a munitions factory which was decommissioned in the 1970s. No landfilling of waste activities has been carried out. The concrete surfacing has fallen into disrepair with many cracks and breaks. The working areas and impermeable surfacing will be developed prior to the operation of the STF.

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

We have checked the location of the application to assess if it is within the 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.

Mattersley Hill Marsh SSSI lies 500m to the North West of the STF.

A number of Local Wildlife Sites also lie within the statutory screening distance. The nearest being Daneshill Lakes and Woodland 400m to the west.

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.

We have not consulted Natural England.

The decision was taken in accordance with our guidance.

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.

Updating permit conditions during consolidation

We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permits.

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.

We have excluded the following wastes for the following reasons:

 19 12 11* - soil from metal recycling facilities contaminated with hydrocarbons.

The operator was unable to explain from where or what treatment operation soils arose from a metal recycling facility. We have concerns that the waste may not just be soil and may contain more contamination than just hydrocarbons.

We have restricted the following wastes for the following reasons

 19 02 05* sludges from the physico/chemical treatment of road sweepings (soil wastes only) containing hazardous substances.

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.

Andrew Clee holds technical competency for treatment of hazardous waste and appropriate continuing competence.

We are satisfied that the operator is technically competent.

Financial competence

There is no known reason to consider that the operator will not be financially able to comply with the 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, our notice on GOV.UK for the public, and the way in which we have considered these in the determination process.

Decisions about land use are matters for the land-use planning system. The location of the facility is a relevant consideration for environmental permitting but only with regard to its potential to have an adverse environmental impact on members of the public or sensitive environmental receptors. The impact on members of the public and the environment had been assessed as part of the determination process and is detailed in this document.

Responses from organisations listed in the consultation section

Response received from the Director of Public Health Bassetlaw District Council.

Brief summary of issues raised: Highlighted Best Available Technique 14 (BAT 14) of the Waste Treatment BAT Conclusions issued 2018 requiring operators to prevent or where not practicable contain, collect and treat diffuse emissions. Suggesting the construction of a structure around the works would prevent fugitive emissions.

Summary of actions taken: We have carried out an assessment of the impact as detailed in the key issues section and this confirms we have significant concerns with regards to diffuse emissions. BAT14 is fundamental to our decision whether to issue or refuse a permit. In this instance we agree that the operator has not adequately demonstrated BAT 14 can be achieved in respect to asbestos handling and treatment.

Response received from the Health and Safety Executive.

Brief summary of issues raised: No comments

Summary of actions taken: -

Representations from local MPs, assembly members, councillors and parish/town community councils

Response received from Brendan Clarke-Smith MP.

Brief summary of issues raised: Consulted with constituents and Parish Councils. Granting a permit would be unsuitable. Proposal would be detrimental to the local population and sensitivity of the site and pose a persistent danger.

Summary of actions taken: -

Representations from individual members of the public

Representations have been grouped with similar comments and a response provided in italics.

Site located too close to nature reserves and villages. Site activities may diminish the amenity value of these areas and pose a threat to wildlife.

The location of the STF is a consideration under the Planning Process however potential impacts upon Daneshill Lakes LWS and Mattersley Hill Marsh SSSI and nearby residential receptors have been assessed as part of the application assessment. We have however assessed all relevant ecological sites and emissions control measures and concluded that the installation would not adversely affect the integrity of those sites.

Concerns regarding the transport of hazardous waste through local villages. Increase in vehicle movements to the site with local roads being unsuitable for heavy vehicles. The road to the site is small and winding with a dangerous crossroads.

Vehicle movements outside of the site boundary fall outside the Environment Agencies remit and are a Planning issue.

It however should be noted the soils bought to site for remediation are replacing soils which would need to be imported to complete the landfill restoration.

Site overlies a principle aquifer. Activities may pose a threat to drinking water in the area. Risk of contaminants entering the food chain.

We have carried out an assessment of impacts to ground and groundwater as part of the application. We consider activities will not lead to contamination. See <u>key issues</u> section for full details.

Concerns with regards to the activities being undertaken outdoors. That there are limited safeguards in place with some soils sheeted while others are not. Questions whether sheeting will provide an acceptable barrier.

Inadequate risk assessments contained within the application. Asbestos cement is subject to weathering and may become friable. Asbestos cement may contain other forms of asbestos other than chrysotile. Sorting outside may lead to fibre release. Use of a building with filtration may be more appropriate.

Transporting, snapping, rubbing will release asbestos fibres.

Wind blows from the west towards Lound Village. Particles may be transported in the air.

No safe level of asbestos 0.01% of chrysotile and 0.01% of other forms is not safe. Concerns with the hazardous nature of asbestos and that there is no safe level of exposure.

Application lacking specific detail with regards to asbestos handling and wrapping. Lack of detail with regards to risk on highway of spillages etc.

Safe operation relies on human judgement. Errors may occur. Relying on human judgement is a high risk option. Without additional measures in place there is too much risk of human error.

The applicant was asked to provide further information on their operating techniques and we have carried out an assessment of the risks of outdoor storage and treatment operations and agree the risks of asbestos fibre release from movement and agitation of the waste is significant. We agree the application lacks detail, the working methods proposed are basic and akin to site remediation activities designed to meet the needs of individual contaminated sites for which works last a short period of time and the risks assessed against the needs of the site on a case by case basis. Installations must adhere to appropriate measures and BAT as detailed previously which in the instance of asbestos activities have not been met.

Operator competence. Historic concerns raised regarding the operation of the Daneshill landfill. Reports of HGV pollution and debris deposited on roads. Previous concerns with HGVs accessing the site without sheeting. Allegations the landfill has a poor compliance history with Nottingham County Council enforcement teams visiting the site.

FCC having poor compliance at other sites including fines from the Health and Safety Executive and enforcement notices for failure to carry out risk assessments.

Allegations the surrounding ditches of the site are contaminated with demolition waste. Footpaths around the site are littered with debris

Off-site vehicle impacts are outside the scope of the permitting process. No significant history of non-compliance regarding the operation of the landfill has

been recorded by the Environment Agency. Standard permit conditions will ensure the EA has the ability to check compliance of the site.

Site area was a previous munitions factory with suspected contamination from associated chemicals. Activities have the potential to expose historic munitions or react with existing chemicals.

The applicant provided a site condition report describing the area proposed for the STF, see above sections of the Decision Document.

Concerns FCC will not be the operator of the facility with Provectus managing the site.

We are satisfied FCC will have control over operations on site. It is acceptable that the operator hires a contractor to carry out activities on site on their behalf.

Site marked for closure December 2023. The STF application reneges on these responsibilities keeping the site open and exposes the community to further disruption from heavy industry, the site having been in place for several decades.

Land use is a planning issue.

Results of asbestos and biofilter monitoring at Edwin Richards Quarry, Rowley Regis is misleading and inappropriate for the situation at Daneshill where activities are undertaken outside.

We consider the biofilter emissions monitoring appropriate as representative emissions data. The site will accept the same range of wastes for treatment within a similar process with external biopiles and bio filter. It is accepted that sites accepting similar wastes in similar quantities will have similar emissions.

We have included conditions within the permit requiring emissions monitoring and improvement conditions requiring the operator to monitor the biofilter to ensure the filter is working efficiently.

Insufficient waste acceptance procedures. Independent analysis of the waste should be undertaken.

Concerns regarding the acceptance of liquid type wastes – drilling muds and oil spills and questions regarding how contaminants such as NORM, BTEX and H2S are tested for.

Liaison Group should be formed between FCC and community groups – complaints procedure.

Concerns with the reuse of contaminated soils for capping material on the landfill

The purpose of the STF is to remediate soils so they are suitable for reuse at the landfill. Prior to reuse soils will be subject to acceptance testing. The treated soils must also fulfil the criteria specified within the restoration plan for the landfill.

Monthly Hydrogen Sulphide monitoring required at the landfill site boundary.

Concerns with the operating hours requested.

Not within the Environment Agency's remit.