

Environment Agency permitting decisions

Bespoke permit

We have decided to grant a permit for Great Billing II Waste Transfer Station operated by Mick George Limited.

The permit number is EPR/SP3935AX/A001.

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.

Description of the main features of the Installation

The permitted facility is a hazardous and non-hazardous waste treatment and transfer facility. The specific waste storage and treatment activities that the facility is permitted to undertake are:

- Storage and transfer of hazardous wastes (waste electronic and electrical equipment (WEEE), clinical waste and asbestos)
- Storage and treatment of non-hazardous waste for the purpose of recovery (including screening, crushing, sorting, shredding and baling)
- Storage and transfer of non-hazardous waste for recovery or disposal

The storage and transfer of hazardous wastes is an activity listed under Section 5.6 Part A(1), Schedule 1 of the Environmental Permitting Regulations. The storage, treatment and transfer of non-hazardous wastes are unlisted waste operation activities. The treatment of non-hazardous wastes is undertaken for the purpose of recovery.

The application submitted by the applicant (now the operator) included additional activities for the bioremediation of hazardous waste soils, which are activities listed under Section 5.3A(1)(a) of the Environmental Permitting Regulations. The operator has not been permitted to undertake these activities because following assessment of the information provided in the application (including responses to two Schedule 5 notices) we have concluded that the operator has not demonstrated that the proposed operating techniques for these activities represent BAT (Best Available Techniques), having regard to the relevant sector guidance note, EPR S5.06, Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste and the waste treatment BAT Reference document (BREF). The reasons for this decision are detailed further in the Key Issues section of this document.

The facility has no point source emissions to air or sewer. The site includes a septic tank for domestic sewage. The facility has one point source emission of uncontaminated surface water (rainwater) to Ecton Brook, which runs along the northern boundary of the site. This discharge is made via a storm water attenuation pond which is provided with an oil interceptor and a penstock valve.

The facility is located to the east of Northampton, to the south-east of Great Billing and south of the A45 and Lower Ecton Lane. Ecton village lies approximately 1.2km to the north-east of the facility. A sewage treatment works is located to the south-west of the facility. Further to the south are open fields, sand and gravel works and the River Nene.

The closest sensitive human receptors are a caravan park (approximately 160m to the west of the facility), Ecton Brook Primary School (approximately 220m to the north-west), and residential properties that lie beyond the school (approximately 270m to the north-west).

There is one designed Special Protection Area (SPA) and Ramsar Habitat Site (Upper Nene Valley Gravel Pits) within 10km of the facility. The facility lies between two separate designated areas of the Upper Nene Valley Gravel Pits; approximately 2.5km to the north-east of one area and 4.2km to the west of the other. There is also one local nature reserve and seven local wildlife sites within 2km of the facility.

The facility will be managed in accordance with an Environmental Management System certified to ISO 14001, OHSAS 18001 and ISO 9001 standards.

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Structure of this document

- Key issues
- Annex 1 the decision checklist
- Annex 2 the web publishing and consultation responses

Key issues of the decision

Bioremediation of hazardous waste soils

The application made by the operator for the proposed facility included waste treatment activities listed under Section 5.3A(1)(a) of the Environmental Permitting Regulations for the bioremediation of hazardous waste soils with an aggregated capacity over 10 tonnes per day.

Bioremediation is a waste treatment process that uses aerobic micro-organisms to breakdown organic contaminants contained within the material, in this case hydrocarbon contaminants in hazardous waste soils. During treatment the material is formed in to piles (biopiles) and aerated. Assuming that the process is undertaken on an appropriate feedstock material and that appropriate operating conditions are maintained (e.g. in terms of oxygen concentration, moisture, pH and temperature) the contaminants can be broken down, primarily to carbon dioxide and water. Generally, bioremediation processes are not suitable for treating materials that contain inorganic contaminants, high molecular weight hydrocarbons or chlorinated hydrocarbons.

Because the bioremediation activities are listed under Section 5, Schedule 1 of the Environmental Permitting Regulations (EPR) they must be operated using Best Available Techniques. The term 'Best Available Techniques' (BAT) is defined in Article 3 of the Industrial Emissions Directive as follows:

'best available techniques' means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole.

Technical guidance note S5.06 provides national guidance on the appropriate measures that are considered to represent Best Available Techniques for the storage and treatment of waste. S5.06 is based upon the European BAT Reference Document (BREF) for the waste treatment and storage sector produced by the European Commission. In order to obtain an Environmental Permit to carry out listed activities an operator must satisfy the competent authority (the Environment Agency) through the submission of an application for an Environmental Permit that their proposals employ Best Available Techniques.

During permit determination, two separate Schedule 5 Notices were sent to the operator requesting further information on the operating techniques proposed for the bioremediation activities in order to demonstrate that they are BAT. We have reviewed the operating techniques proposed by the operator for the bioremediation activities, as set out in the application (original application documents and responses to two Schedule 5 Notices) and compared these with S5.06 and the Waste Treatment BREF.

The proposed operating techniques provided for the bioremediation activities depart from the appropriate measures contained in S5.06 and the BREF. We have concluded that we cannot permit the facility to undertake the proposed Section 5.3A(1)(a) bioremediation activities applied for because it has not been demonstrated that the proposed operating techniques are BAT. The specific reasons for this decision are detailed further below.

Appropriate measures for waste characterisation, sampling and checking

As stated in the Key Issues section of S5.06 (p.10), waste characterisation, sampling and checking are essential to waste management operations. It goes on to explain that *'failure to screen waste samples adequately prior to acceptance and to confirm the composition on arrival at the installation has historically led to subsequent problems, which include inappropriate storage and mixing of incompatible substances, accumulation of wastes and unexpected treatment characteristics. Applicants will therefore be required to demonstrate that these activities will be carried out rigorously to ensure their effectiveness.'*

The composition of contaminated hazardous waste soil is likely to vary within and between loads due to the quantities of material that may be generated by contaminated land sites, the possibility of contamination hotspots at the sites, and the potential presence of a wide range of contaminants. Also, each contaminated land site is likely to be different depending upon its history and potential uses (sources/causes of contamination) and therefore waste pre-acceptance and acceptance procedures, and associated sampling/testing, need to be rigorous enough to be able to identify and manage any such uncertainty and variability.

In terms of waste bioremediation activities, waste characterisation, sampling and checking are essential in order to ensure that only wastes appropriate for treatment are accepted (e.g. containing suitable organic contaminants that can be treated biologically). For example, if the waste contains inorganic contaminants these are unlikely to be treated by the process and therefore will remain in the material post-treatment, which may mean that the waste is unsuitable for the intended waste disposal/recovery route. If residual contamination is not identified this could result in harm to the environment through subsequent ground contamination if the waste was applied to land. If the material contains high molecular weight hydrocarbons that are not identified or assessed through waste acceptance the waste may not be fully or effectively treated by the biological process, or it may take a significantly longer time to treat, resulting in the accumulation of waste on site. Waste could also be received that contain volatile organic compounds (VOCs) and odorous substances that could result in the release of emissions to air during storage and treatment if not identified and managed appropriately at the waste acceptance stage. Waste characterisation is also important to ensure that the material does not contain any contaminants or substances that could harm or kill the microorganisms that the treatment process is reliant upon.

BAT point 8, Section 2.1.2 of S5.06 requires that all waste received at a facility (other than those specifically listed) must be sampled, checked and tested to confirm the composition of the material upon arrival at the facility prior to acceptance for storage or treatment:

'Other than pure product chemicals and laboratory smalls, no wastes should be accepted at the installation without sampling, checking and testing being carried out. Reliance solely on the written information supplied is not acceptable, and physical verification and analytical confirmation are required. All wastes, whether for on-site treatment or simply storage, must be sampled and undergo verification and compliance testing.'

The information provided by the operator for the bioremediation activity (including responses to two Schedule 5 Notices) proposed that hazardous waste soils would be sampled and tested for the purpose of waste acceptance/rejection on a 1 in 1000 tonne basis, increasing to 1 in 500 tonnes if variability of waste composition is identified through the pre-acceptance tests. No information was provided explaining how such variability of waste composition would be identified and defined by the facility's waste pre-acceptance procedures. It is also unclear how this sampling/testing programme would be undertaken if the quantity of waste received from a site for treatment was less than the 1000 tonne or 500 tonne thresholds proposed.

It is worth noting that the maximum vehicle weight allowed on the road in the United Kingdom is 44 tonnes. Therefore the proposed sampling/testing programme could effectively mean that at most only 1 in 25 loads would be sampled, or 1 in 12 if waste pre-acceptance identified 'variability' in the composition of the waste. If waste was received in 20 tonne loads, which is likely to be a more realistic scenario than 40 tonne loads, it would only be sampled at a frequency of 1 in 50 loads, or 1 in 25 loads if of 'variable' composition. This could mean that some waste from small sites is never sampled and tested. The operator also proposed to sample and test treated waste soils at a similar frequency, i.e. 1 sample in every 500 or 1000 tonnes produced, to confirm that it has been fully treated and appropriate for the identified waste recovery/disposal option.

Our technical guidance document WM3 Guidance on the Classification and Assessment of Waste provides guidance on the sampling of waste and sets out how sampling should be designed and undertaken to ensure that it produces representative and reliable data. Representative and reliable sampling data in this sense would be capable of accurately characterising the composition of the waste material in question, taking into account the size/number of waste loads/batches and any variability within or between them. Despite being requested through a Schedule 5 notice, information was not provided by the operator to demonstrate how a representative and reliable sample would be obtained from the received or treated waste (i.e. in terms of the size and number of samples taken and how this would be proportionate to the quantity/variability of material in question).

Based upon the information provided by the operator, we do not consider that the limited frequency of waste testing and sampling proposed meets the

requirements of S5.06 for ensuring that all wastes received are sampled, checked and tested as part of waste acceptance and therefore it does not represent Best Available Techniques. Nor have they justified the lesser frequency they have proposed in terms of risk. We also consider that it is also unlikely to meet the requirements of WM3 Guidance on the Classification and Assessment of Waste for ensuring that representative and reliable samples of material will be taken, taking into account potential spatial and temporal variation within and between loads received for treatment or sent for disposal/recovery.

BAT point 11, Section 2.1.2 of S5.06 requires that operators must have clear and unambiguous criteria for the rejection of wastes. The operator has confirmed that only waste soils classified as hazardous waste by hydrocarbon content would be accepted for treatment by bioremediation, with a content between 1,000 and 10,000 parts per million (ppm). However the operator has not confirmed the range of determinands that waste samples would be analysed for, or provided clear criteria against which waste will be assessed, in order to confirm that they are suitable for treatment through waste acceptance (i.e. to confirm that waste loads received are only hazardous by hydrocarbon content, that the hydrocarbon contaminants present are appropriate for treatment (high volatility and high molecular weight hydrocarbon contaminants may not be appropriate) and the waste does not contain other organic/inorganic contaminants or have other physical/chemical properties that would make the waste unsuitable for treatment).

During the application determination the operator was asked through two Schedule 5 notices to provide further information to demonstrate how their waste acceptance measures would include criteria for specific organic and inorganic contaminants and specific substances/compounds that would make waste unsuitable for treatment (e.g. those that could cause odour, such as highly volatile or other odorous compounds, or that would not be treated by the biological process, such as persistent organic pollutants, chlorinated compounds, long chain/heavy hydrocarbons, heavy metals) and their associated thresholds/criteria for acceptance/rejection. This information was not provided to us by the operator during permit determination. Because of this, we are not satisfied that the operator will have clear and unambiguous criteria for the acceptance/rejection of waste for the proposed bioremediation activities, in accordance with S5.06, and therefore we are not satisfied it has been demonstrated that the proposed operating techniques for these activities will be BAT.

Clear criteria for the acceptance and rejection of waste and adequate (reliable/representative) waste sampling/testing are important measures for the prevention of odour from the proposed bioremediation activities. The Odour Management Plan (OMP) and associated odour assessment contained in the application concluded that the bioremediation treatment process will not generate any odours (as hydrocarbons are fully broken down to H₂O and CO₂) so long as waste acceptance procedures are followed. Table 4 of the OMP stated that soils containing substances other than hydrocarbons could potentially cause odour from the bioremediation process. However, for the

reasons outlined above, we are not satisfied that the proposed waste acceptance criteria and sampling/testing measures will prevent the acceptance of waste containing such substances. Specifically, the application has not adequately identified what such substances are or detailed how they would be identified and excluded from the treatment process by the facility's waste acceptance procedures in order to prevent odour. Inadequate criteria for the acceptance and rejection of waste could, as mentioned above, also lead to waste being accepted that takes much longer to treat than expected, that could not be adequately treated or harms the microorganisms that the proposed treatment would be reliant on.

Additionally, BAT point 20 of Section 2.1.2 of S5.06 states that '*the installation should have a designated sampling point or reception area. These should be in close but safe proximity to the laboratory/checking facility*'. The operator confirmed in their application that the proposed facility will not have a laboratory on-site and that samples taken of received waste will be sent off-site to an accredited laboratory for the purpose of waste acceptance. In accordance with S5.06 waste must be held in a designated reception area pending the results of the waste acceptance sampling, which confirm whether the waste can be accepted for storage/treatment at the facility. S5.06 states that such storage in the waste reception area should be for a maximum of 5 days. The operator confirmed in their application that this requirement would be met. However, without there being an on-site laboratory (or it being demonstrated that there is one in close proximity to the facility) we have concerns with regards to whether or not this would be achievable in practice (i.e. depending upon how long it takes for a sample of waste to be taken, sent to the off-site laboratory, the analysis to be undertaken and results sent back to the operator and an appropriate assessment carried out to determine whether or not the waste can be accepted for storage/treatment).

Appropriate measures for waste treatment

BAT point 5 of Section 2.1.4 of S5.06 requires that waste treatment processes must have clearly defined objectives and end points. The Waste Treatment BREF also states that BAT is to analyse the 'waste out' [treated waste] according to the relevant parameters important for the receiving facility (Section 5.1, BAT point 11). This is to demonstrate that the waste has been fully treated by the process and is suitable for the identified disposal or recovery route.

We are not satisfied that the operator has demonstrated that the proposed operating techniques for the bioremediation activities are BAT having regard to these requirements. Through two Schedule 5 notices the operator was asked to confirm the specific parameters and criteria that waste would be tested against in order to confirm that it has been fully treated and is appropriate for the proposed recovery or disposal route, taking into account potential residual organic and inorganic contaminants. The application stated that the material would either be used as landfill cover material (disposal) or

landfill restoration material (recovery) and therefore parameters/criteria for these routes were requested.

In response to the Schedule 5 notices, the operator confirmed that the hazardous waste soils would be treated to achieve non-hazardous waste classification and that treatment criteria would be determined by the intended disposal or recovery route for the material. The operator confirmed that waste accepted for bioremediation would be limited to that classified as hazardous waste by hydrocarbon content only. A reduction in hydrocarbon concentrations below the hazardous waste threshold, as defined by Technical Guidance WM3, should therefore mean that the material had been treated to non-hazardous status.

However, no specific parameters or criteria were provided demonstrating how this assessment would be made. Also, achieving non-hazardous waste status would not necessarily mean that the waste would be suitable for the intended destination, for example its recovery for use as a landfill restoration material. It would not take into account the presence or content of residual organic and inorganic contaminants (other than hydrocarbons) that are below the hazardous waste threshold but which could still affect the wastes suitability for recovery. Due to the lack of information provided on the treatment objectives and specific parameters/criteria that would be used to assess whether treatment is complete and the material is suitable for its intended destination we are not satisfied that the operator has demonstrated what the relevant parameters of the site receiving the treated waste are likely to be. It has also not been explained or demonstrated how it would be ensured that these requirements are met through waste acceptance, operation of the treatment process and the testing of treated material.

This is compounded by the fact that, as explained above, we are not satisfied that the proposed programme for sampling/testing treated waste soils, at a frequency of 1 sample for every 500-1000 tonnes treated, is BAT or would satisfy the requirements of WM3 for ensuring that waste samples taken are representative of the material tested and capable of reliably demonstrating that the waste is suitable for the intended disposal or recovery route.

Section 2.1.4 of S5.06 states that treatment plant should be specifically designed, commissioned and operated to be fit for purpose. Section 2.2.6 of S5.06 requires that where odour generating activities take place in the open or potentially odorous materials are stored outside a high level of management control and use of best practice will be required.

Based upon the information provided in the application (including responses to two Schedule 5 notices) we are not satisfied that it has been demonstrated that the proposed mechanical method of biopile aeration represents BAT, in terms of how the treatment plant will be designed and operated to be fit for purpose or how it represents BAT for the prevention of fugitive emissions to air, specifically dust, VOCs and odour.

The soil bioremediation process detailed in the original application and odour management plan referred to the use of an active aeration system that would use pipework to continuously draw air through the piles of material (biopiles) in order to maintain aerobic conditions and reduce potentially odorous fugitive. An advantage of such an aeration system is that potentially odorous air can be collected and directed to an abatement system, such as a carbon filter or biofilter. Also, unlike mechanical turning methods, the system is not reliant upon the physical agitation of the material to provide aeration, which could result in fugitive emissions to air (e.g. dust and odour). However, during permit determination the operator stated that this system would not be used and that the material would instead be turned mechanically using a 360° excavator at a frequency of once per week.

A standard 360° excavator is not considered as plant specifically designed and operated to be fit for purpose, in terms of the turning of biopiles or best practice for the prevention of fugitive emissions (odour). Therefore additional information was requested from the operator (through two Schedule 5 notices) to demonstrate that the proposed method of biopile aeration (mechanical turning) would be BAT, specifically in terms of achieving the necessary level of process control (in terms of providing effective and consistent aeration within the biopiles) and preventing fugitive emission to air (e.g. odour).

Based upon the information received, we are not satisfied that the operator provided adequate information to demonstrate how the biopile turning process and machinery proposed would be designed and operated at the facility and to justify the proposed operating techniques as being BAT, in comparison to other operating techniques, such as those that employ air extraction systems instead of mechanical turning (as originally referred to in the application).

There was no appraisal of the method proposed against alternative methods to demonstrate what was proposed was BAT. Insufficient information was provided to confirm how the turning process and machinery used would be designed and operated to ensure that the material would be turned in a controlled fashion in order to prevent potential emissions to air (i.e. dust, volatile organic compounds and odour) and loss of material from the piles, whilst ensuring that adequate aerobic conditions are achieved and maintained throughout the waste.

Again, this is compounded by the conclusion that, as detailed previously, we are not satisfied that the facility's waste acceptance procedures represent BAT for the identification and rejection of wastes that may contain unsuitable contaminants (i.e. those that may result in odorous emissions during treatment or material aeration).

Summary

Taking the above factors into account, we are not satisfied that it has been demonstrated by the operator that the operating techniques for the proposed bioremediation activities are BAT. We are not satisfied that appropriate measures will be in place in order to ensure that:

- wastes received at the facility will be fully characterised and assessed in order to ensure that only waste appropriate for treatment by the proposed bioremediation process will be accepted at the facility;
- waste produced by the facility will be fully characterised and assessed in order to ensure that it is suitable for the intended disposal or recovery route; and
- the proposed operations, in terms of waste acceptance and process operation and design, will be BAT for the prevention of fugitive emissions to air (e.g. of dust, VOCs and odour).

Annex 1: decision checklist

This document should be read in conjunction with the application, supporting information and permit/notice.

Aspect considered	Justification / Detail	Criteria met
Receipt of submission		
Confidential information	A claim for commercial or industrial confidentiality has not been made.	✓
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 commercial confidentiality.	✓
Consultation		
Scope of consultation	<p>The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.</p> <p>For this application we consulted the following bodies:</p> <ul style="list-style-type: none"> • Local Authority Environmental Protection Department • Planning Authority • Public Health England and the relevant Director of Public Health • Food Standards Agency • Health and Safety Executive • Local fire service 	✓
Responses to consultation and web publicising	<p>The web publicising and consultation responses (Annex 2) were taken into account in the decision.</p> <p>The decision was taken in accordance with our guidance.</p>	✓
Operator		
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.	✓

Aspect considered	Justification / Detail	Criteria met Yes
The facility		
The regulated facility	<p>The extent/nature of the activities and operations taking place at the site required clarification.</p> <p>The decision on the facility was taken in accordance with Appendix 2 of RGN 2 “Defining the scope of the installation” and Appendix 1 of RGN 2 “Interpretation of Schedule 1”.</p> <p>The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations and the following directly associated activities.</p> <p><u>Activities listed in Part 2 of Schedule 1:</u></p> <ul style="list-style-type: none"> • Section S5.6 A1(a) Temporary storage of hazardous waste with a total capacity exceeding 10 tonnes. <p><u>Directly associated activities:</u></p> <ul style="list-style-type: none"> • Surface water management • Wastewater collection • Storage of fuels (2000 litre oil tank) <p>The regulated facility also contains waste operations in the form of a non-hazardous waste transfer station. The following recovery and disposal operations will be undertaken:</p> <p>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p>R3: Recycling/reclamation of organic substances which are not used as solvents</p> <p>R4: Recycling/reclamation of metals and metal compounds</p> <p>R5: Recycling/reclamation of other inorganic compounds</p> <p>D15: Storage of waste pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p>The site plan and application provided by the operator made reference to a concrete batching plant. This activity is not authorised under this permit. This plant is not associated with the activities authorised under this</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>permit and will be regulated by the Local Authority under a Part B permit.</p> <p>The application and site plan also made reference to non-waste top soils and aggregates that are stored at the site. The storage and use of these non-waste materials are not associated with any of the permitted activities and are therefore outside of the scope of the Environmental Permit. They are stored at the site for use in the company's construction business. The operator has confirmed that these materials are non-waste materials only and will comply with the relevant industry codes of practice and protocols concerning the definition of waste.</p>	
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility including discharge points.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.</p>	✓
Site condition report	<p>The operator has provided a description of the condition of the site.</p> <p>We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED – guidance and templates (H5).</p> <p>The submitted application site report included baseline data for total hydrocarbons only. Due to the historical land use (which could have resulted in ground contamination other than by hydrocarbons) and following consultation with the local contaminated land and groundwater team it was concluded the operator should provide further data to</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>establish the state of soil and groundwater contamination, in accordance with Article 12 of the Industrial Emissions Directive. Pre-operational condition IP3 of the permit requires the operator to collect additional baseline reference data for the site in order to establish existing ground conditions and identify any historical contamination, including metals & sulphates.</p> <p>Pre-operational condition IP4 requires the operator to provide the Environment Agency with an updated application site report to incorporate this data and relevant details of the site's sealed drainage system following completion of Pre-operational condition IP1.</p>	
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat .</p> <p>A full assessment of the application and its potential to affect the relevant habitat sites has been carried out as part of the permitting process. We consider that the application will not affect the features of the habitat sites.</p> <p>We have not formally consulted on the application. Natural England were sent a copy of the habitat assessment for information only. The decision was taken in accordance with our guidance.</p>	✓
Environmental Risk Assessment and operating techniques		
EIA	In determining the application we have considered the Environmental Statement.	✓
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment for the permitted activities is satisfactory.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, all emissions may be categorised as environmentally insignificant.</p> <p>The facility has no point source emissions to air or sewer.</p> <p>The facility has one point source emission to surface water. The application states that this release is limited to</p>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>uncontaminated surface water discharged from the site's storm water pond. The surface water passes through an oil interceptor and settlement/grit chamber prior to entering the storm water pond. The whole site will be provided with concrete hardstanding. The perimeter of the hardstanding will be provided with containment kerbing and sleeping policemen at the site entrances.</p> <p>There will be one 2000 litre oil storage tank at the facility used for servicing the on-site vehicles. The oil tank will be double skinned and provided with a concrete bund that has a capacity of at least 110% of the tank. An inspection and maintenance programme will be in place for all site infrastructure, including drainage systems, surfacing, below surface structures and tanks.</p> <p>BAT point 3, Section 2.2.5 of S5.06 states that operational areas of the facility should be connected to a sealed drainage system unless the risk is negligible. The operator stated in the application that site drainage, including the storm water pond and associated drainage channel, is for uncontaminated surface water from clean yard and roof areas only and that sealed drainage will be provided to ensure that this is the case. However certain external areas of the site, including areas where wastes are stored, were not provided with sealed drainage on the plans provided, these include the external site areas where asbestos, scrap metal, WEEE and clinical waste would be stored.</p> <p>Activities undertaken in these areas have the potential to result in contamination and therefore must be provided with sealed drainage prior to operation in order to ensure that only clean surface water is discharged to the storm water pond. Pre-operational condition IP1 has therefore been included in the permit requiring the operator to ensure that all relevant areas of the site are provided with an appropriate engineered sealed drainage system and that it is designed and constructed to meet the requirements of relevant technical guidance. Pre-operational condition IP6 requires the operator to provide the Environment Agency with a written copy of the preventative inspection and maintenance plan for the facility that will form part of the operator's environmental management system.</p> <p>The operator provided quantitative noise assessment and modelling for the facility as part of the application. The</p>	

Aspect considered	Justification / Detail	Criteria met Yes
	<p>assessment considered noise levels at the location of the nearest noise sensitive receptor; a caravan park 160m to the west of the facility on Lower Ecton Lane. The assessment concluded that, in accordance with our technical guidance H3 Horizontal Guidance for Noise and BS4142:2014, noise levels associated with the operation of the facility will have a low impact as they do not exceed existing background noise levels. The noise assessment and modelling was reviewed by the Environment Agency's specialist Air Quality Modelling and Assessment Unit (AQMAU).</p> <p>AQMAU agreed with the assessment and the conclusion that the proposed facility would have a low impact. However, they recommended that the operator should also justify that the facility will not have an impact upon an additional local noise sensitive receptor; Ecton Brook Road housing estate, located approximately 290m to the north of the facility and on the other side of the A45. They also recommended that noise sources located within the building are considered in the assessment. The original assessment had not considered the screening plant as being located within the building.</p> <p>The revised assessment addressing the recommendations made by AQMAU was requested and submitted by the operator in response to the Schedule 5 notice dated 04/08/2015. This demonstrated that predicted noise levels from the facility at both receptors (on Lower Ecton Lane and Ecton Brook) would still be below existing background levels and therefore would be of low impact.</p> <p>We are satisfied that appropriate measures will be implemented at the facility to prevent fugitive emissions to air, including dust. The operator will employ a range of techniques at the facility, including the following measures:</p> <p>Use of mobile water bowsers and sprays to dampen external areas of the site and external waste storage areas and hardcore crushing.</p> <p>Use of road sweeper to keep external areas of the site clean.</p> <p>Dust suppression (misting) system fitted within roof of waste recovery building and provision of curtain barrier fitted on open side of building facing away from the predominant wind direction.</p>	

Aspect considered	Justification / Detail	Criteria met Yes
	<p>Dust monitoring undertaken around the site perimeter, with a deposition gauges on each of the four sides of the site.</p> <p>Wastes stored internally and externally in blockwork bays with a headspace of 1 block (or 0.6m) maintained between the top of the waste and the top of the bay to prevent loss of material.</p> <p>Provision of dedicated weather station to record wind direction and speed.</p> <p>Site inspections undertaken 3 times per day to check the condition of the site and identify any issues (morning, midday and afternoon).</p> <p>Sheeting/covering of waste to prevent dust, for example when conditions are dry and windy.</p> <p>Shredding and screening activities will be undertaken in the recycling building provided with dust suppression. Shredded and screened wastes will be stored in bays within the building.</p> <p>Waste pre-acceptance and acceptance will ensure that potentially dusty loads are only received and accepted in sealed or covered containers.</p> <p>Procedures will be included in the facility's EMS to ensure that dust emissions or complaints are identified, recorded and responded to.</p> <p>Gypsum/plasterboard will be stored in an sealed skip or a covered bay within the treatment building. It will not be treated (screened) on site.</p> <p>Asbestos will be stored on site double-bagged and in a locked, sealed skip.</p>	
Operating techniques	<p>The application submitted by the operator included the following activities:</p> <ol style="list-style-type: none"> 1. Bioremediation of hazardous waste soils (listed under Section 5.3A(1)(a) of the Environmental Permitting Regulations) 2. Storage of hazardous wastes (listed under Section 5.6 of the Environmental Permitting Regulations) 3. The storage, treatment and transfer of non-hazardous wastes (unlisted waste operation) <p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes, as detailed below.</p>	

Aspect considered	Justification / Detail	Criteria met Yes
	<p>The key measures proposed by the operator have been compared against S5.06: 'Recovery and disposal of hazardous and non-hazardous waste' and the relevant BAT reference document.</p> <p>1. Bioremediation of hazardous waste soils</p> <p>For the reasons set out in the Key Issues section of this document we have not permitted the operator to undertake the proposed bioremediation activities listed under Section 5.3A(1)(a) of the Environmental Permitting Regulations.</p> <p>2. Storage and transfer of other hazardous wastes</p> <p>The permitted Section 5.6 activity is for the storage of hazardous waste at the facility with a total capacity exceeding 50 tonnes. Permitted hazardous wastes stored at the site are restricted to limited quantities of asbestos waste, clinical waste and waste electronic and electrical equipment (WEEE).</p> <p>Subject to completion of Pre-operational condition IP1 (provision of sealed drainage for all waste storage and handling areas) we are satisfied that appropriate measures will be in place for the storage and transfer of these wastes in the quantities permitted.</p> <p>Clinical waste will be received in limited quantities from Local Authority deliveries and healthcare waste producers. The waste will be stored for transfer inside the facility's recycling building in lockable wheelie bins in accordance with the relevant requirements of guidance note EPR5.07. Clinical waste will be transferred off-site within 48 hours of arrival.</p> <p>Asbestos waste will be stored for transfer, double-bagged and within a sealed and locked skip. The waste will be transferred off-site once the dedicated skip is full.</p> <p>WEEE will be stored for transfer in a dedicated roofed and curtain-sided trailer. Small items of WEEE will be stored in an enclosed skip. WEEE waste will be removed from site within 1 month of acceptance.</p> <p>The operator is not permitted to repackage (bulk-up)</p>	

Aspect considered	Justification / Detail	Criteria met Yes
	<p>hazardous waste at the facility.</p> <p>3. Storage, treatment and transfer of non-hazardous wastes (unlisted waste operation)</p> <p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. Subject to completion of Pre-operational condition IP1, we are satisfied that the proposed techniques for priorities for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility.</p> <p>Fire Prevention Plan</p> <p>We have reviewed and approved the Fire Prevention Plan and consider it complies with the requirements of our Fire Prevention Plan guidance note.</p> <p>Odour Management Plan</p> <p>We have assessed the operators Odour Management Plan (OMP) and we approve the OMP in as far as it goes but set out below the ways in which we consider it to be deficient and, in particular, which additional appropriate measures the operator needs to take.</p> <p>Pre-operational condition IP5 requires the operator to review and update the OMP to ensure that it reflects the activities that the facility is permitted to undertake. The odour management plan shall also ensure that odour monitoring (sniff tests) is undertaken as part of routine daily site inspections and that it specifies the criteria and associated action levels that monitoring results for material temperature and moisture content will be assessed against.</p> <p>Key control measures for preventing odour at the facility are waste pre-acceptance and acceptance procedures; ensuring that wastes received will not result in odorous emissions, either through the rejection of potentially odorous waste or ensuring that the material is received and managed on-site in a way that prevents odour. Pre-operational condition IP2 requires the operator to provide the facility's waste pre-acceptance and acceptance procedures for approval.</p>	

Aspect considered	Justification / Detail	Criteria met
		Yes
The permit conditions		
Waste types	<p>We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.</p> <p>Conditions relating to the type and quantity of waste that can be accepted are set out in Table S1.1 and Tables S2.2 and S2.3 of the permit. No liquid wastes will be accepted at the facility.</p> <p>The facility is permitted to accept a limited number and quantities of other hazardous wastes for the purpose of storage and transfer. These wastes are limited to Waste Electronic and Electrical Equipment (WEEE), asbestos and clinical waste. The acceptance of other hazardous wastes for storage and transfer, including a wide range of containerised wastes, was withdrawn from the application by the operator during permit determination.</p> <p>We made these decisions with respect to waste types in accordance with Sector Guidance Note S5.06.</p>	✓
Pre-operational conditions	<p>Based on the information in the application, we consider that we need to impose pre-operational conditions. These conditions have been summarised in the preceding sections of this document.</p>	✓
Incorporating the application	<p>We have specified that the operator must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.</p> <p>These descriptions are specified in the Operating Techniques table in the permit.</p>	✓
Emission limits	<p>We have decided that emission limits should be not set in the permit.</p> <p>The facility has one point source emission to surface water. The conditions of the permit require that the discharge is of clean, uncontaminated surface water only.</p>	✓
Reporting	<p>We have specified reporting in the permit.</p> <p>The reporting frequency is annual and is consistent with</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	the requirements placed upon comparable permitted facilities.	
Operator Competence		
Environment management system	There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓
Technical competence	Technical competency is required for activities permitted. The operator is a member of an agreed scheme.	✓
Relevant convictions	The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in RGN 5 on Operator Competence.	✓
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓

Annex 2: External Consultation and web publicising responses

Summary of responses to consultation and web publication and the way in which we have taken these into account in the determination process.

Response received from
Northamptonshire Fire and Rescue Service
Brief summary of issues raised
Confirmed that proposals are considered satisfactory and that a fire risk assessment will be carried out by the Fire & Rescue Service.
Summary of actions taken or show how this has been covered
No actions required.

Response received from
Northamptonshire Borough Council, Planning Department
Brief summary of issues raised
Confirmed that the Council has no comments on the matter.
Summary of actions taken or show how this has been covered
No actions required.

Response received from
Public Health England
Brief summary of issues raised
<ol style="list-style-type: none">1. The Environmental Permit issued for the site should contain conditions to ensure that the following potential emissions do not impact upon public health:<ol style="list-style-type: none">a) emissions to air including particulates/dust, volatile organic carbons (VOCs) and asbestos from fugitive sources on site; andb) odours arising from activities on site including remediation, handling and storage.2. Ensure that the Environment Agency's Fire Prevention Plan guidance is followed.
Summary of actions taken or show how this has been covered
<ol style="list-style-type: none">1. We have reviewed the measures proposed by the operator for the prevention of fugitive emissions to air, including dust, VOCs and asbestos, and odour as detailed in the Operating Techniques section of this document. Conditions 3.2 and 3.3 of the Environmental Permit will ensure that potential emissions will not impact upon public health.2. The operator has submitted a Fire Prevention Plan and this has been assessed and approved by the Environment Agency.