Permitting decisions

Bespoke permit

Consultation on our decision document recording our decision-making process

The Permit Number is: EPR/GB3202XN/A001
The Operator is: 4Recycling Ltd
The Waste Site is located at: The Old Peat Works, Reading Gate, Swinefleet, Goole, East Riding of Yorkshire, DN14 8DT.

What this document is about

This is a decision document, which accompanies a permit.

It explains how we have considered the Operator's Application, and why we have included the specific conditions in the permit we issuing to the Operator. It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our position. Unless the document explains otherwise, we have accepted the Operator's proposals.

We try to explain our decision as accurately, comprehensively and plainly as possible. Achieving all three objectives is not always easy, and we would welcome any feedback as to how we might improve our decision documents in future.

Preliminary information and use of terms

We gave the application the reference number EPR/GB3202XN. We refer to the application as "the **Application**" in this document in order to be consistent.

The number we haven given to the permit is EPR/GB3202XN/A001. We refer to the proposed permit as "the **Permit**" in this document.

The Application was duly made on 15 March 2019.

The Operator is 4Recycling Ltd. We refer to 4Recycling Ltd as "the **Operator**" in this document.

4Recycling Ltd proposed facility is located at The Old Peat Works, Reading Gate, Swinefleet, Goole, East Riding of Yorkshire, DN14 8DT. We refer to this as "**the site**" in this document.

The permit authorises the Operator to store and treat hazardous and non-hazardous wastes on site to produce materials suitable for spreading to land as soil improvers and replacements for artificial fertilisers. The annual throughput of the site is limited to 100,000 tonnes per year of which no more than 10,000 tonnes

is to be hazardous waste. The maximum quantity of hazardous waste treated on site is not to exceed 10 tonnes a day with no more than 50 tonnes of hazardous waste, pending treatment, to be stored on site at any one time.

The activites allowed on site include:

- The chemical and physical treatment (consisting only of blending, mixing, separation, and thickening of waste for recovery) of sludges and other wastes where only product lime will be used to sanitise or solidify sludges,
- The conditioning of ashes, cemet kiln and by-pass dusts with water only,
- The physical treatment of wastes (consisting only of manual sorting, separation, screening, baling, shredding, crushing or compaction of waste into different components for recovery) and
- The storage of wastes prior to land treatment.

The permit does not allow any spreading of treated waste to land. All wastes accepted and subsequently treated on the site will require the appropriate assessment and authorisation prior to spreading to land. All treatment and storage of wastes will be undertaken on impermeable surfacing with all contaminated surface water collected in the onsite ‘dirty water lagoon’ for offsite disposal. Only clean, uncontaminated surface water will be discharged to the surrounding water courses via the clean water lagoon.

1 Our decision

We have decided to grant the permit for The Old Peat Works operated by 4Recycling Ltd.

We consider that, in reaching that decision, we have taken into account all relevant considerations and legal requirements and that the permit will ensure that a high level of protection is provided for the environment and human health.

The Permit contains many conditions taken from our standard Environmental Permit template including the relevant Annexes. We developed these conditions in consultation with industry, having regard to the legal requirements of the Environmental Permitting Regulations and other relevant legislation. This document does not therefore include an explanation for these standard conditions. Where they are included in the permit, we have considered the Application and accepted the details are sufficient and satisfactory to make the standard condition appropriate.

2 How we reached our decision

2.1 Receipt of Application

The Application was duly made on 15 March 2019. This means we considered it was in the correct form and contained sufficient information for us to begin our determination but not that it necessarily contained all the information we would need to complete that determination: see below.

The Operator claimed that certain information was commercially confidential and should be withheld from the public register. We considered this request and determined that the supplier of one of the wastes should be kept confidential in order to protect commercial information. Apart from the issues and information just described, we have not received any information in relation to the Application that appears to be confidential in relation to any party.

2.2 Consultation on the Application

We carried out consultation on the Application in accordance with the Environmental Permitting (England and Wales) Regulations 2016 ("EPR"), our statutory Public Participation Statement ("PPS") and our own internal guidance Regulatory Guidance Series ("RGS") Note 6 for Determinations involving Sites of High Public Interest. We consider that this process satisfies, and frequently goes beyond the requirements of the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, which are directly incorporated into the Industrial Emissions Directive ("IED"), which applies to the waste site and the Application. We have also taken into account our obligations under the Local Democracy, Economic Development and Construction Act 2009 (particularly Section 23). This requires us, where we consider it appropriate, to take such steps as we consider appropriate to secure the involvement of representatives of interested persons in the exercise of our functions, by providing them with information, consulting them or involving them in any other way. In this case, our consultation already satisfies the Act's requirements.

We advertised the Application by a notice placed on Citizen Space between 22 March 2019 and the 8 May 2019, which contained all the information required by Environmental Permitting Regulations and our public participation statement, including telling people where and when they could see a copy of the Application.

We made a copy of the Application and all other documents relevant to our determination (see below) available to view on our Public Register. Anyone wishing to see these documents could do so and arrange for copies to be made.

We have consulted of the Application with the following bodies, which includes those with whom we have "Working Together Agreements":

- Food Standards Agency;
- Local Planning Authority (East Riding District Council);
- Environmental Health (East Riding District Council);
- Department of Public Health (East Riding District Council);
- Public Health England;
- Animal and Plant Health Authority;
- Lead Local Flood Authority; and
- Internal Drainage Board.

These are bodies whose expertise, democratic accountability and/or local knowledge make it appropriate for us to seek their views directly.

Note under our Working Together Agreement with Natural England, we only inform Natural England of the results of our assessment of the impact of the waste site on designated Habitats sites.

In addition to our advertising, we undertook a programme of extended public consultation. A briefing note was emailed to the local Member of Parliament and town councillors, who are members of the local liaison group, informing them of the consultation on gov.uk.

Further details along with a summary of consultation comments and our response to the representations we received can be found at the end of this document. We have taken all relevant representations into consideration in reaching our final decision.

2.3 Requests for Further Information

Although we were able to consider the Application duly made, we needed more information in order to determine it, and issued information notices on 3 June 2019 and 20 September 2019. A copy of each information notice was placed on our Public Register.

In addition to our information notices, we received additional information during the determination from the Operator on 28 May 2019, 2 August 2019, 11 October 2019, 21 November 2019, 06 May 2020, 28 July 2020, 22 September 2020, 24 September 2020 and 09 October 2020 . The additional information includes:

- Confirmation of the site boundary;
- Submission of habitats risk assessment;
- Confirmation that only product lime will be used for sanitising and solidifying sludges;
- Confirmation that wastes coded as 10 01 01, 10 13 12* and 10 13 13 will be conditioned with water only;
- Revised Site Plan;
- Detailed description of the site drainage;
- Details surrounding the destination of recovered wastes;
- Waste acceptance criteria for hazardous wastes accepted on site;
- Clarification on how wastes coded as EWC 19 08 01 will be treated and stored to produce 19 08 02;
- Clarification over the use of EWC 02 01 07;
- Clarification of how wastes accepted as 17 08 02 will be processed to produce EWC 19 12 12;
- Clarification of how wastes coded as 19 02 06 will be used for landfill restoration;
- Risk assessment for the onsite diesel generator;
- Revised Clean water plan Ref 31/10/19;
- Revised Dirty Water Plan Ref 31/10/19;
- Clarification over the use of EWC 06 02 01*;
- Removal of waste codes 20 03 06 and 20 03 99.
- Clarification on the treatment of waste coded as 19 06 06;

- Revised Fire Prevention Plan (ref 23/09/2020);
- Revised list of waste (reflecting the changes as detailed below); and
- Revised odour management plan.

We made a copy of this information available to the public in the same way as the responses to our information notices.

Having carefully considered the Application and all other relevant information, we put our draft decision before the public and other interested parties in the form of a draft Permit, together with our draft decision document. As a result of this stage in the process, the public were provided with all the information that is relevant to our determination, including the original Application and additional information obtained subsequently. The public were given two separate opportunities to comment on the Application and its determination. We consulted on our draft decision from 17 August 2020 to 21 September 2020. A summary of the consultation responses and how we have taken into account all relevant representations is shown at the end of this document.

Key issues of the decision

Description of application

4Recycling Ltd ("4R") have applied to operate a waste treatment and storage facility at The Old Peat Works, Reading Gate, Swinefleet, Goole, East Riding Of Yorkshire, DN14 8DT. The site is located approximately 3.8 km north of Crowle and approximately 3.5 km west of Eastoft and is centred at approximately National Grid Reference (NGR) SE 76921 16851.

The permit authorises the Operator to store and treat hazardous and non-hazardous wastes on site to produce materials suitable for spreading to land as soil improvers and replacements for artificial fertilisers. The permit does not allow spreading of the treated wastes to land and the correct authorisations must be in place for spreading activities. The annual throughput of the site is limited to 100,000 tonnes per year of which no more than 10,000 tonnes is to be hazardous waste. The maximum quantity of hazardous waste treated on site is not to exceed 10 tonnes a day with no more than 50 tonnes of hazardous waste, pending treatment, to be stored on site at any one time.

All treatment of waste will be undertaken within the process building. Once treated, and only if suitable, wastes will be stored outside in the yard area. The storage of wastes will be undertaken on an impermeable surface with all contaminated surface water collected in the onsite 'dirty water lagoon' for offsite disposal. Only clean, uncontaminated surface water will be discharged to the surrounding water courses via the clean water lagoon.

Site condition report

A site condition report was submitted with the application, which includes information on the previous land use and details of the geological setting of the site.

Historically the land and existing buildings were used as a peat processing site (circa 1890). More recently the surrounding areas of concrete hard standing has been confined for the storage of agricultural wastes. The boundary of the site as it currently stands does not appear to have altered significantly.

There are no known contraventions (including enforcements, prosecutions, serving of prohibition notices or listed pollution incidents) within the boundary of the site or within 250 m of the site boundary. The site lies within a Flood Zone 3, the risk of flooding form fluvial/tidal sources is considered to be 1 in 200 years due to the presence of defences and distances from them.

The underlying bedrock is Mudstone Mercia, which is overlain by Warp sediment (clay, slit and sand). The site lies over a Secondary A superficial deposit aquifer which lies above a secondary B bedrock aquifer. The site does not lie within any designated ground water Source Protection Zone (SPZ).

All waste processing and treatment will be undertaken within the process building, with only suitable wastes being stored outside after treatment. All treatment and storage will be undertaken on an impermeable surface with sealed drainage. All contaminated water will be collected on site and drain to the 'dirty water lagoon'. Uncontaminated water will drain to the onsite clean water lagoon prior to discharge to the surface drains. We agree that, as the site has adequate surfacing and sealed drainage in conjunction with the sites waste acceptance and storage procedures (as detailed below) sufficient measures are in place to prevent contamination to the surrounding ground and surfacewater.

Waste codes

The use of 99 waste codes

Following the assessment of the wastes codes included within the application, we informed the Operator on 20 December 2019, that we would be unable to include waste codes with a 99 suffix. Defra and the Environment Agency are in the process of removing 99 codes from Bespoke permits, Standard Rules permits and exemptions. As such it would be inappropriate for the permit to be issued with the applied for 99 codes as this would undermine this approach.

Wastes with a 99 suffix should only be utilised in exceptional cases and when there is no other appropriate waste code available. Wastes accepted at the site which currently have a 99 code are likely to be captured under more appropriate waste codes as listed in the European Waste Catalogue (EWC).

Currently the 99 coded wastes are still included within the Standard Rule permits for landspreading. In order to cover this disparity a Regulatory Position Statement (RPS) will be issued to bridge the gap between the wastes listed on the permit and those listed in the Standard Rules permits until such time the Standard Rules permits are varied. There is no change to the type of wastes the Operator is allowed to accept on site, the only changes are the waste code and description where appropriate, subsequently there is no change to the risk posed by changing the waste codes or descriptions.

Removal of waste codes from the application

The Operator had originally proposed to include ‘waste from sewage cleaning (20 03 06)’, ‘cesspool wastes and other sewage sludge (20 03 99)’ and catering wastes (02 02 99)’. It was assessed that it was not appropriate for the operator to take these wastes. The Operator subsequently agreed to remove these wastes from the application.

Changes to waste codes and descriptions

The draft permit included two waste types that contained 99 codes, these were 02 01 99 (slurry, manure and soiled bedding from any premises (except abattoirs), soiled biodegradable bedding not made from plant tissue and soiled bedding desiccants only) and 02 02 99 (slurry, manure and soiled bedding from abattoirs including soiled biodegradable bedding not made from plant tissue and solid bedding desiccants only). The waste codes have been changed to 02 01 06 with the same descriptions. As previously mentioned the changing of the waste code will not have an impact on the risk the waste poses.

Waste pre-acceptance, acceptance and storage procedures

Prior to waste being accepted on site the Operator will undertake pre-acceptance checks by gathering information about the waste. This will include the:

- Type of process producing the waste;
- Specific process from which the waste derives;
- Quantity of waste;
- Chemical analysis of the waste to aid treatment, storage and eventual land spreading;
- Form of the waste e.g. solid, liquid, sludge;
- Any hazards associated with the waste; and
- Sample storage and preservation techniques (if required)

Unless a sample and analysis has already been completed by a third party and the Operator has sufficient written information regarding the waste, representatives of the Operator will obtain representative sample(s) for analysis. Sampling will only be undertaken by persons who are technically competent to undertake sampling with all analyses carried out by accredited laboratories. Data will be interpreted fully by Fertiliser

Advisers Certification and Training Scheme (“FACTS“) qualified technical staff. An assessment will be made on the suitability for treatment, storage and land use. All chemical analysis will be undertaken on genuine samples rather than relying on data sheets. Only wastes which have a clear treatment and storage plan and are able to be applied to land either as a sole material or post treatment will be accepted at the site.

Waste materials delivered to the site will go through a series of checks upon arrival to ensure the material is suitable for treatment and storage.

- Upon arrival all loads will be weighed at the sites weighbridge.
- Wastes will not be accepted unless sufficient storage capacity exists and the site is adequately manned to receive the waste.
- Wastes will be assessed for suitability of acceptance by an appropriately trained member of staff.
- Wastes will be inspected before offloading where safety permits, in all cases an inspection of the load will take place immediately upon offloading.
- Wastes will be compared against the accompanying paperwork to ensure waste types and quantities are correct.
- Any wastes which are found to be non-conforming will be rejected and the load will be will be returned to the waste producer where possible. If this is not possible the waste will be directed to an unused containment bay which will be used as a quarantine area, where it will remain segregated from the rest of the wastes on site, prior to removal from site.

Waste storage and handling

- All wastes will either be stored outside in purpose built bays or within the main building in purpose built bays. All storage areas within the building and outside will be impervious with sealed drainage.
- Solid wastes will be transferred directly to the process building. The building will be enclosed and equipped with roller shutter doors in order to provide containment and minimise emissions of odour, litter and dust. The shutter doors will remain closed during the unloading of wastes and will only open to allow the delivery vehicle to exit.
- Liquid wastes will be stored in sealed tanks, which will be located on impervious surface that is resistant to the material being stored within a bunded area that has the capacity at least 110% of the largest vessel or 25% of the total tankage volume, whichever is greater. Tanks and bunds will be inspected regularly and repaired and maintained
- Liquid tanks will be fitted with active carbon filters to treat displaced air. Tanks will be fitted with level meters with both audible and visual high-level alarms.
- Pipework will be routed above ground wherever possible. Any below ground pipework will be contained within suitable inspection channels wherever possible.
- Wastes with a high odour potential will be treated within 48 hours of reception, wastes will a lower odour potential will be treated within 7 days of reception. Priority will be given to the treatment of more odorous materials.

Waste treatment

The site will undertake the treatment of non-hazardous bio-solids, the mechanical treatment of waste materials, the treatment of hazardous wastes (limited to cement and by-past dusts) and the storage of wastes pending use in land treatment.

Bio-solids will be treated with product grade lime to a defined Hazard Analysis and Critical Control Point (“HACCP“) treatment protocol. Lime will be mixed with the sludges via a plough chare mixer. The treatment raises the pH to over 12, which causes a decrease in the microbial activity and ensures the sludges have met the protocols set out in the HACCP guidance. The resulting product can be used on agricultural land.

The mechanical treatment of wastes will mainly consist of screening wastes using air separation, density separation and trommel screening to remove physical contaminates and to grade the final product.

Treatment also includes shredding and crushing of wastes. The conditioning of cement kiln dust and by-pass dust with water only is undertaken to allow for easier application under the land spreading permits.

In addition wastes will be accepted on site for storage only pending recovery. The wastes accepted under this activity are listed within the Standard Rules permit for land spreading (SR 2010 No4) or the Standard Rules permit for land restoration and improvement (SR 2010 No5).

Impact of Covid-19 on sludge quality

The Environmnet Agency is following advice from the World Health Organization (WHO) in relation to the treatment of sludges and the potential risks of transmitting Covid-19. The WHO advise states that 'to date there is no evidence that the Covid-19 virus has been transmitted via sewerage systems with or without wastewater treatment.' This advice gives us confidence that Covid-19 does not necessitate additional controls above those best practices which are already used in the supply and use of sludge in agriculture.

Odour

The operator has provided an Odour Management Plan (OMP) which details the potential sources of odour, control and prevention measures and monitoring and management procedures in place. The OMP only considers the risk of odour originating from the activities on site. Odours attributed to the delivery, collection or transportation of waste outside of the site boundary are not covered by the permit.

The site is located in a predominately rural setting. The nearest residential receptors to the facility are Red House Farm (Approximately 525m east of the site) and The Red bungalow (approximately 770m north, north east of the site). The prevailing wind direction is from the south west of the site.

The permit allows for the treatment of hazardous and non-hazardous waste and storage of waste pending recovery.

The areas of the site with the potential to generate odour have been identified in the Odour Management Plan ("OMP") as follows:

- Importing of waste materials to site;
- Reception of waste materials;
- Moving and handling of waste materials;
- Processing and treatment of waste materials;
- Storage of treated wastes; and
- Loading of product for export from the site.

All waste treatment will take place within the process building, with liquid and granular wastes stored in appropriate tanks or silos. Therefore it is expected the main source of potential odour will be from the importing of waste materials to site and the storage of treated wastes. Odour emissions from waste reception will be controlled by the sites waste acceptance procedures. All deliveries will be planned and managed to ensure there is sufficient capacity available, to prevent excess material onsite. Waste will be checked on arrival at the site to ensure that only permitted waste is accepted. Waste loads delivered to the site will be carried in enclosed or sheeted vehicles and all solid waste will be off-loaded, stored and treated inside the building. Once treated, waste will either be stored internally or externally depending on their nature and characteristics as described in section 2.4 of the approved OMP. Storage locations will be assessed based on a product storage risk assessment. Products with a higher odour generating potential will be stored internally, whereas materials with a medium or low odour generating potential will be stored externally. The assessment of the wastes will be dynamic in that if materials have an odour greater (or less) than the expected odour profile the risk assessment and the storage locations shall be amended accordingly.

Materials stored within the building after treatment will be within defined area/bays separated by concrete or sleeper walls. These measures will assist in the prevention of odour volatilisation and evaporation from the stored wastes by virtue of the bays minimising the surface area.

Materials stored externally will also be stored within bays on an impervious surface with sealed drainage to ensure the containment of any leachate. The external bays will be enclosed on three sides with a roof and a curtain on the front side. Thus controlling the exposure of the stockpiles and reducing the potential for odour volatilisation and evaporation from the stored materials.

Wastes with a higher odour generating potential will be treated within 48 hours of reception. Wastes with a lower odour generating potential will be treated within 7 days of reception. Priority will be given to the treatment of more odorous materials. Materials will be removed from site as soon as practicable, within the constraints of the receiving sites (cropping regimes, soil moisture and weather conditions). Wastes and product stock levels will be minimised on site to reduce odour emissions. Treated wastes will remain on site for a maximum period of 3 months.

To further reduce odour emissions from site activities, the Operator proposes the following measures:

- Rejecting individual loads and generic wastes streams with unacceptably high odour emissions and/or odour potential
- Keeping vehicles and their wheels clean when delivering and collecting wastes and products, and particularly when leaving the site.
- Keeping working areas clean and free from spills during the day and particularly at the end of shifts.
- Keeping building doors closed at all times when access is not required.
- Cleaning and washing out un-used/empty storage bays at the end of each working day.
- Being prepared to abandon specific wastes and products if it is impracticable to control their off-site odour impacts as a backstop measure.

The OMP also details procedures which will be in place for monitoring odour at the site. Sniff tests will be carried out at multiple points around the site boundary and at multiple times during the working day from early morning to early evening. If during the sniff testing odours are detected the intensity and persistence of the odour will be assessed and observations recorded in the appropriate form.

Odour monitoring results will be reviewed regularly (initially monthly) to evaluate the effectiveness of the odour control measures used at the site. This will enable the Operator to identify circumstances that cause increases in odour emissions. Sniff testing will be undertaken by suitable persons who have experience of the types of odours generated by the wastes accepted on site. The persons who undertake the sniff testing will be staff who don't work within any areas of the site where they are routinely exposed to odours which would adversely affect their sensitivity to these odours.

We consider that the conditions in the permit are sufficient to ensure that odour emissions from the facility do not cause annoyance. Odour Monitoring by daily sniff tests at the site boundary will also ensure that emissions of odour are not causing annoyance. In the event that odour emissions are causing pollution, the permit conditions require the Operator to comply with the measures specified in the site's odour management plan. If required the Environment Agency can request a revised OMP should there be further issues relating to odour beyond the site boundary.

Fire Prevention Plan

We have a regulatory duty to protect the environment and people. A fire that occurs on a site storing combustible waste materials can have a severe impact on the environment and on local communities. Waste fires can produce smoke that contains a variety of harmful emissions including asphyxiants and irritants. The longer the exposure to smoke the more likely there may be significant pollution or harm to human health. Therefore our approach is first to minimise the risk of a fire occurring and then to recognise that if a fire does occur it should be extinguished as quickly as possible whilst at the same time preventing it from spreading.

The measures set out in the Fire Prevention Plans: Environmental Permits Guidance (November 2016) (the Guidance) have therefore been designed to meet the following three objectives:

- minimise the likelihood of a fire happening;
- aim for a fire to be extinguished within 4 hours; and
- minimise the spread of fire within the site and to neighbouring sites.

There is a potential risk of fire from the site due to the treatment and storage of combustible non-hazardous wastes. The Operator submitted a Fire Prevention Plan ("FPP") as part of the application. The FPP sets out the measures put in place to prevent a fire and the actions that will be taken in the event of a fire occurring. Appropriate measures are in place for managing common causes of fire; preventing self-combustion; managing waste pile sizes; preventing fire spread; quarantine area; firefighting techniques; fire water containment; and contingency planning during and after an incident. We consider these to be in line with the Guidance.

The operator has identified the potential risk of fire from the site due to the treatment and storage of combustible non-hazardous wastes on site. In this case, mainly from waste wood, off spec compost, and screenings. The FPP sets out the measures put in place to prevent a fire and the actions that will be taken in the event of a fire occurring.

As the site is yet to be commissioned the FPP does not include all of the measures set out in our Guidance. We have assessed the FPP and set out below where measures in line with the guidance are in place and where the Operator will have to provide further information prior to accepting combustible waste on site.

Appropriate measures are in place for non-waste materials, managing common causes of fire, preventing self-combustion, preventing fire spread, quarantine area, fire water containment and contingency planning during and after an incident. We consider these to be in line with the guidance.

The following alternative measures which we have assessed are listed below, we are satisfied that they each meet the objectives of the guidance.

Fire water

The site is located in a rural area with no access to mains water or a fire hydrant. In order for the site to comply with paragraph 16 of our guidance 'Water Supplies' the lined clean water pond situated to the east of the site has been enlarged to ensure a sufficient volume of water is held at all times. The guidance states the site must have enough water available to manage the worst case scenario, which is considered to be the largest waste pile catching fire. The calculated water supply is at least 2,000 litres a minute for a minimum of 3 hours for a 300 cubic meter pile of combustible material. The largest pile at the site will be 450 m^3, the required water supply is 540 m^3.

The clean water pond will be enlarged to a have surface area of 1300 m^2, thus having a water supply capacity of between 1300 m^3 and 2600 m^3. The pond will be fitted with couplings suitable for fire pumps, filters will be fitted on the end of the pipe to mitigate against any debris which may be within the pond. Clean surface water originating from roofs and guttering will be directed to the pond. The Operator has listed contingency measures during adverse weather conditions to ensure the required volume of water is always available. Level markers will be installed to indicate the water volume in the pond, one at 1080 m^3 (1080 m^3 is twice the volume of water required for the largest pile size) and a second at 1300 m^3. As part of the daily site checks the water level of the pond will be checked to ensure the level isn't below the 108 0m^3 mark. If the water level is below this level, clean water will be tankered to the site. During cold weather conditions the pond and associated pipe work could freeze. The pipe work and pumps will be insulated with appropriate jackets and lagging to prevent freezing. The pipe inlet will be at the bottom of the pond, which will allow for extraction of water even if the surface is frozen.

Fire water containment

The site will be surfaced with a mixture of concrete and impermeable hardstanding. The edge of the yard area where waste will be stored will be bunded by two sleeping policemen with a depth of 200 mm. This area will provide 374 m^3 of containment. The yard area is drained to an onsite dirty water lagoon which has a capacity of 400 m^3 (20 m x 20 m x 1 m). The dirty water lagoon will have a 50% capacity available at all times for fire water. The operator will use a level marker and daily monitoring to ensure the level of the dirty water lagoon is at a maximum level of 500 mm. The containment capacity of site is 574 m^3. Any dirty water or fire water will be removed from the site and disposed of at a fully licensed treatment facility.

Should further capacity be required the Operator has access to their own tanker and arrangements with local haulage firms to collect and dispose of fire water at short notice.

Detecting and suppressing fires

All sites which store or treat combustible wastes are required to have a detection system in place in order to detect a fire in its early stages. The detection system is to be proportionate to the nature and scale of the activities carried out and the associate risks. Where wastes are to be installed within a building our Guidance states that 'you must install a fire suppression system' which is to be proportionate to the nature and the scale of activities carried out and the associated risks.

The FPP states that the Opertaor proposes to install and use the PREVENTiT early warning system which will automatically monitor stockpile temperatures and will notify site staff should the temperatures increase above pre-set trigger points (55^oC). The system has the functionality to send early warning alerts to site staff when temperatures reach 50^oC. The use of an early warning system such as this provides adequate lead time for action to be taken in order to prevent a fire from occurring on site. In the event that an early warning message is received staff will attend site to undertake further monitoring and assess the most appropriate course of action such as removing the waste to the quarantine area or the mechanical turning of the wastes to remove hot spots.

As the site proposes to store combustible materials within a building the site is required to have a suppression system. Currently the site is yet to be operational and as such a suppression system has yet to be finalised or installed. The Operator is proposing to install a 'pump and deluge system' which if required will pump water from the clean water pond to the required areas. The Operator will consult with a fire prevention company on a system to be installed and that is appropriate to the risk posed by the site. We have therefore included a Pre-Operational Measure (POFD3) that requires the Operator to provide an updated FPP for approval prior to accepting or treating combustible waste on site. The updated plan shall include the all of the information as stated within paragraph 14 of our guidance.

Surface water management and discharge

Clean surface water runoff will be collected separately from the potentially contaminated runoff/ leachate. Clean rain water run-off from the external yard and from some of the building roofs will drain to the clean water pond to the east of the waste treatment building. The clean water pond will be enlarged to a have surface area of 1300 m^2, as stated in the sites Fire Prevention Plan (FPP). The pond will be lined to prevent any infiltration in to the surrounding groundwater. The volume of clean water held in the pond will be between 1300 m^3 and 2600 m^3 in order to meet the requirements of the FPP. Excess water will be discharged to the internal drainage board drains at a rate of 10 l/s via an orifice plate. The discharge rate will prevent localised flooding.

Contaminated surface water originating from the yard areas and within the main processing building will be retained within the bunded site and drain to the onsite 'dirty water lagoon'. The dirty water is confined on site by 300 mm concrete kerbs and 200 mm high 'sleeping policeman' bunds. The containment capacity on site is exceeds the runoff created during a 1 in 100 year storm of 60 hour duration, with a 40% uplift to allow for climate change. The lagoon is surrounded by a perimeter bund which will not be less than 1.5 m in height.

The lagoon will be lined which will extend up to the inner surface of the bund. The capacity of the lagoon is 400 m^3 (20 m x 20 m x 1 m), the lagoon will have 50% capacity at all times as a contingency to contain firewater. All dirty water originating on site will be tankered offsite for disposal at a fully licensed treatment facility.

Liquid wastes delivered by tanker will be discharged directly to a sealed and bunded tank to ensure any accidental spills are contained. Deliveries and collections of liquids and sludges will be supervised. The Operator has stated that connections will be checked to ensure a good seal and the delivery/collection will be observed so that any leaks or spills are detected and resolved. Before any transfer begins the level in the receiving tank will be checked to ensure that sufficient capacity is available. The operator has confirmed that tanks and bunds will be inspected weekly and repaired and maintained as necessary.

The Operator has confirmed that all plant and equipment will be serviced and maintained in accordance with the manufacturer's recommendations, minimising the risk of spills from site plant. A maintenance programme will also be in place for tanks, pipes and bunds; regular inspections will ensure that they remain fit for purpose. Spill kits will be available on site.

Based upon the information in the application, we are satisfied that appropriate measures will be in place to prevent fugitive emissions of contaminated water to surface water and groundwater.

Dust

Following their risk assessment the Operator concluded that the risk of dust arising from onsite activities is expected to be low. Dust attributed to the transportation of waste to or from the site is not covered by the permit. The Operator will implement the following control measures to reduce the emissions of dust on site:

- All processing of wastes will be undertaken within the enclosed process building;
- The undertaking of risk assessments of all wastes accepted on site;
- The use of the onsite weather station to assess wind speed and direction;
- The regular cleaning of the yard areas to prevent the build-up of mud which can lead to dust during dry conditions; and
- The use of mobile plant to apply clean water to waste piles.

Based upon the information in the application, we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise pollution from dust. We are satisfied that the standard emission of substances not controlled by emission limits condition, together with the operating techniques described in the application and summarised above, are sufficient and no other measures are necessary at this time.

Noise

Following their risk assessment the Operator concluded that the risk of noise from the site is expected to be low. This is based on design measures and operating techniques incorporated into the new site. These are summarised below:

- All wastes treatment to be undertaken within a building;
- Distance from the site boundary to the closest sensitive receptor;
- All plant machinery will be operated and maintained in accordance with the manufacturer's instructions; and
- Operating hours in accordance with planning permission.

Based upon the information in the application, we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise pollution from noise. We are satisfied that the standard

noise condition, together with the operating techniques described in the application and summarised above, are sufficient and no other measures are necessary at this time.

Pests

Given the nature of the material and operations to be undertaken on site, there is potential for the site to attract pests such as flies and vermin. The risk assessment submitted with the application considers this and details operating techniques in place to mitigate against pests. These are summarised below:

- All wastes will arrive in sheeted lorries or sheeted containers;
- Waste will be treated within the process building;
- Wastes with a higher odour potential will be treated within 48 hours of receipt;
- Liquid wastes will be stored in enclosed tanks, wastes with a high odour potential after treatment will be stored within the process building. Wastes stored outside will be stored in containment bays which will be enclosed on three sides. The covering of wastes will minimise the potential for odour volatilisation and evaporation;
- Wastes will arrive on site having under gone an element of treatment which will break the life cycle and reduce the risk of flies;
- Regular cleaning of the site and cleaning and washing out of un-used and empty storage bays.
- A pest control contractor will make monthly visits to the site; and
- Staff will inspect the site on a daily basis and any signs of infestation will be recorded. Should pests be observed at significant levels, arrangements will be made for a pest control contactor to attend the site as soon as possible.

Based upon the information in the application, we are satisfied that the appropriate measures will be in place to ensure the activities will not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the site boundary. We are satisfied that the standard pests condition, together with the operating techniques described in the application and summarised above are sufficient and no other measures are necessary at this time.

Habitats

The site is situated a minimum of 1.2 km from the boundary of the following protected habitats:

- Thorne, Crowle and Goole Moors Site of Special Scientific Interest (SSSI);
- Thorne Moor Special Area of Conservation (SAC);
- Thorne and Hatfield Moors Special Protection Area (SPA);

All treatment of waste materials will be undertaken within the process building with the storage of treated wastes either within the process building or within purpose built bays in the external yard area. All treatment and storage of treated wastes will be on an impermeable surface with sealed drainage. Only uncontaminated rainwater from roofs and guttering will be discharged into the surrounding surface water ditches, via the clean water pond. The contaminated water will drain to the onsite dirty water lagoon which will be emptied on a regular basis and treated at a designated facility. Wastes which are stored outside will be covered on three sides with a curtain at the front of the bay, this will reduce the chance of any waste of debris blowing off site into the neighbouring habitats.

Although the site falls outside of our screening distance, as we received a number of resposnses with concerns over potential impact, we undertook a Habitats Risk Assessment Stage 1 for the European protected habitats and an Appendix 4 for the SSSI site, these have been saved for ‘Information only’ on the public register. We did not consult with Natural England as our assessment concluded there would be no ‘significant impact’ on the named habitats from the site, this is in line with our guidance and working together agreement. We are confident that our measurements to the site are accurate, however should the distance between the boundary of the site and the named habitats be less than our screening distance our conclusion

of no signifigant impact would remain. Furthermore, Natural England were consulted as part of the planning application, and in May 2019 following some clarifications they concluded that “the proposed development will not damage or destroy the interest features for which the site has been notified and has no objections”.

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

On site generator

Due to the location of the site, the site is unable to link to the National Grid. As such the site will use a diesel generator to provide power to the welfare facilities on site including the site office, pumps and the electrical mixer on site. The generator will be housed within the plant room with an exhaust vented to the external wall. The generator will have a maximum thermal input power of 390 kW, if run at 100% capacity. The size of the generator is below the threshold of our specified generator guidance which is for generators with a thermal input between 1 MWth and 50 MWth. This also applies to generators of less than 1 MWth if they have a capacity or an agreement to provide a balancing service or part of a group of generators which in total has a rated input of between 1 MWth and 50 MWth input. Due to the size of the generator the input is considered to be minimal, the generator will comply with the following directives:

- EN 12100, EN13857, EN60204;
- 2006/42/CE Machinery safety;
- 2006/95/EC Low voltage;
- 2004/108/CE Electromagnetic compatibility;
- 2000/14/EC Sound Power Level (amended by 2005/88/EC);
- 97/68/EC Emissions (amended by 2002/88/EC & 2004/26/EC);
- Power according to ISO 8528 and ISO 3046.

As part of our ‘working together agreements’ we consulted with Public Health England (“PHE”). To summarise the consultation, PHE has no concerns regarding the risk to health of the local population. This is based on the assumption that the permit holder shall take appropriate measures to prevent or control pollution, in accordance with relevant sector guidance and industry best practice.

Impacts to air quality from the movement of vehicles off site in the delivery and collection of materials to and from site have not been considered within this application. Decisions about land use and impacts of traffic are matters for the land-use planning system.

We are satisfied that the Operator has taken appropriate measures to ensure that impacts on the local air quality will be minimal.

Pre-Operational Measures

The permit includes 2 Pre-Operational (“PO“) measures which requires the Operator to provide further information to the Environment Agency prior to the activities commencing on site.

- PO1 – Prior to the acceptance of waste on site the Operator is required to ensure that the onsite borehole (SE71NE3) is appropriately protected to prevent contamination of the groundwater. Evidence shall be provided to the Environment Agency for agreement in writing prior to operations commencing.

- PO2 – Prior to the commencement of operations the Operator is to provide a revised site plan that details the location of the onsite generator.

Pre-operational measures for future development

The permit includes 4 Pre-Operational Measures for Future Development (POFD), which require the Operator to provide further information to the Environment Agency prior to the acceptance of wastes for treatment and/or storage.

- POFD1 - Prior to the acceptance of liquid and granular wastes for treatment or storage, the Operator is to provide evidence to the Environment Agency that the site surface has been repaired and confirmed to be impermeable. POFD1 also requires the Operator to provide evidendce to demonstrate the integrity of the proposed containment for contaminated water. In addition POFD1 requires a report confirming that the silos for the storage of liquid and granular wastes are bunded correctly in order to contain 110% of the largest tank. If there are any changes to the sites drainage a revised drainage plan(s) is required to be submitted and re-assessed.

- POFD2 – Prior to the acceptance of solid wastes for treatment or storage, the Operator is to provide evidence to the Environment Agency that the site surface including that within the process building has been repaired and is confirmed to be impermeable. POFD2 also requires the Operator to provide evidendce to demonstrate the integrity of the proposed containment for contaminated water In addition POFD2 requires the Operator to provide evidence that the process building has been repaired to ensure it is suitable for the treatment and storage of wastes. Should there be any changes to the drainage of the site a revised drainage plan(s) will need to be submitted and re-assessed.

- POFD3 – Prior to the acceptance of any combustible waste the Operator is to provide the design, installation and maintenance of the fire detection and suppression system within the process building. In addition the Operator is required to provide finalised details on the detection system for the outside storage areas and a revised fire prevention plan (FPP) incorporating the above points. Following the installation of an appropriate system the Operator will need to submit a revised FPP for re-assessment.

- POFD4 – Prior to the acceptance of waste coded as 19 13 06 ‘sludges from groundwater remediation other than those mentioned in 19 13 05’ for storage prior to landspreading the Operator is to provide written evidence to the Environment Agency that there is an appropriate outlet for this waste.

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has been made. We have accepted the claim for confidentiality. We have excluded details of a waste supplier. We consider that the inclusion of the relevant information on the public register would prejudice the Operator's interests to an unreasonable degree. The reasons for this are given in the notice of determination for the claim. 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.
Consultation	
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement. The application was publicised on the GOV.UK website. We consulted the following organisations: • Public Health England; • Food Standards Agency; • Environmental health – East Riding Council; • Local planning Authority – East Riding Council; • Department of Public Health – East Riding Council; • Lead Local Flood Agency; • Internal Drainage Board; and • Animal, Plant Health Agency. The comments and our responses are summarised in the consultation section.
Engagement	We consider this Application to be of high public interest and so have engaged with the following stakeholders, as per the engagement plan. A briefing note was sent via email to the following stakeholders to inform them of the live consultation on gov.uk. • Local MP; • Town councillors; • Local liaison Groups; and • Local residents. Residents are also part of a local liaison group. The briefing note was sent via email to this liaison group informing them of the live consultation on gov.uk. For residents who do not have access to email a hard copy of the briefing note was sent along with a consultation response document which included

Aspect considered	Decision
	instructions to request hard copies of the application documents. The comments and our responses are summarised in the consultation section of this document.
Operator	
Control of the facility	We are satisfied that 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 our guidance on legal operator for environmental permits.
The facility	
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 RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits. 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	
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. 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.
Biodiversity, heritage, landscape and nature conservation	The application is not within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. Please refer to the Key Issues section above.
Environmental risk assessment	
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory. The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment, all emissions may be categorised as environmentally insignificant.
Operating techniques	
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 Operator must use are specified in table S1.3 in the environmental permit.
Odour management	We have reviewed the odour management plan in accordance with our

Aspect considered	Decision
	guidance on odour management. We consider that the odour management plan is satisfactory. See key issues 'odour management plan' above for more information.
Fire prevention plan	We have set pre-operational measures to allow the operator time in which to implement their fire prevention plan before commencing the activities authorised. See key issues 'Fire Prevention' above for more information.
Permit conditions	
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 excluded a number of wastes types as it was deemed they were not suitable for the operator to take. For details of the wastes removed from the application see the key issues 'Waste Codes' above.
Pre-operational meaures	Based on the information in the application, we consider that we need to impose pre-operational measures and pre-operational measures for future development. For details of these measure please see the key issues section above.
Emission limits	We have decided that emission limits are not required in the permit.
Operator competence	
Management system	There is no known 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 an agreed scheme. The site benefits from a Technical Competent Manager who holds a Waste Management Industry Training Board (WAMITAB) certificate for the Treatment of Hazardous Waste, Non Hazardous Waste and Land spreading. We are satisfied that the operator is technically competent.
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in our

Aspect considered	Decision
	guidance on operator competence.
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	
Section 108 Deregulation Act 2015 – 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. 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

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.

No responses were received from the following organisations:

- Food Standards Agency;
- Environmental health – East Riding Council;
- Local planning Authority – East Riding Council;
- Department of Public Health – East Riding Council;
- Lead Local Flood Agency;
- Internal Drainage Board; and
- Animal, Plant Health Agency.

Responses from organisations listed in the consultation section

Response received from
Public Health England (PHE) (18/04/2019)
Brief summary of issues raised
The main points raised by Public Health England is the potential fugitive emissions of dust and odour from the site. Based on the information provided within the application Public Health England have no significant concerns regarding risk to health of the local population from this proposed activity, providing that the appropriate measures are in place to prevent or control pollution.
Summary of actions taken or show how this has been covered
The permit ensures appropriate measures to prevent or control pollution are taken. The permit includes the standard odour condition which states that emissions from the activities shall be free of levels likely to cause pollution outside the site boundary. The site has an approved OMP which details the control and prevention of odour emissions on site. Please refer to the key issues section above for further details on odour.

Representations from local MP, councillors and parish/town community councils

Response received from
Mr Percy (MP) (19/03/2019)
Brief summary of issues raised
The main points raised by Mr Percy relate to the potential for contaminated materials entering the land drainage system, the use of a soak away on site and the risk to the SAC & SPA sites from the discharging of bioaerosols and ammonia to the atmosphere.
Summary of actions taken or show how this has been covered
All materials will be treated and stored on impermeable surface with sealed drainage. Only uncontaminated surface water originating from roofs and guttering will be discharged to the land drains via the clean water pond. All contaminated water from storage and treatment areas will be collected in the dirty water lagoon which will be removed from site by tanker to a registered facility. The use of a soakaway

doesn't form part of the application. All wastes will be treated within the waste processing building before being stored in covered bays externally. Wastes which have the potential to release ammonia and bioaerosols will be treated as a priority and within the main processing building. Furthermore there are no sensitive receptors within 250 m of the site boundary which is the screening distance for bioaerosols. The protected habitats are a minimum of 1.2 km from the boundary of the site. As waste is treated within the process building and the site will benefit from a sealed drainage system, with no discharge of contaminated water, impact on the named habitats is unlikely.

Response received from
Mr Barrett (East Riding of Yorkshire Council) Parish Councillor (28/03/2019)
Brief summary of issues raised
The main point raised is the risk of contaminated material entering the surrounding areas from the onsite storage ponds. The risk posed by the transporting of materials to the site and the risk to the surrounding habitats from the release of ammonia to the atmosphere.
Summary of actions taken or show how this has been covered
All waste will be treated within the process building, once treated wastes with a lower generating potential will be stored in covered external bays. The site will have a sealed drainage system to ensure that only clean surfacewater originating from roofs and guttering is discharged to the surrounding land drains via the clean water pond. All contaminated surface water from the external yard area and the process building will be diverted to the onsite dirty water lagoon which will emptied regularly and disposed of at a registered facility. Wastes with a risk of releasing ammonia and bioaerosols will be treated as a priority and within the process building. The named habitats are a minimum of 1.2km from the boundary of the site and are unlikely to be impacted by the release of bioaerosols or ammonia from the site. Please refer to the key issues section above for further details on the OMP. The transporting of materials to and from the site has not been considered as part of this application. Decisions about land use and impacts of traffic are matters for the land-use planning system.

Response received from
Councillor Fox (East Riding of Yorkshire Council) (02/04/2019)
Brief summary of issues raised
The main points raised are the potential risk of contaminated materials entering the surrounding watercourses and the risk to the nearby protected habitats (SAC & SPA) from the release of ammonia and bioaerosols.
Summary of actions taken or show how this has been covered
All waste will be treated within the process building, once treated wastes with a lower generating potential will be stored in covered external bays. The site will have a sealed drainage system to ensure that only clean surfacewater originating from roofs and guttering is discharged to the surrounding land drains via the clean water pond. All contaminated surface water from the external yard area and the process building will be diverted to the onsite dirty water lagoon which will emptied regularly and disposed of at a registered facility. Wastes with a risk of releasing ammonia and bioaerosols will be treated as a priority and within the process building. The named habitats are a minimum of 1.2 km from the boundary of the site and are unlikely to be impacted by the release of bioaerosols and ammonia from the site.

Response received from
Crowle and Ealand Town Council (01/05/2019)
Brief summary of issues raised
The following points were raised: • The negative impacts relating to an increase in vehicle movements resulting in damage to the surrounding roads, potential impact on public safety and health and the impacts on the properties along the proposed transport routes. • The impact the site will have on the surrounding protected habitats. • The use of bio-sludge fertilisers on the surrounding farmland.
Summary of actions taken or show how this has been covered
Comments about land use and impacts of traffic are matters for the land-use planning system and not considered under this permit application. The site is situated a minimum of 1.2 km from the boundary of the named habitats. All waste will be treated within the process building, once treated wastes with a lower generating potential will be stored in covered external bays. The site will have a sealed drainage system to ensure that only clean surfacewater originating from roofs and guttering is discharged to the surrounding land drains via the clean water pond. All contaminated surface water from the external yard area and the process building will be diverted to the onsite dirty water lagoon which will emptied regularly and disposed of at a registered facility. We consider the impact on the surrounding habitats to be minimal. The permit does not allow the spreading of wastes to land and the necessary authorisations would need to be in place for spreading activities.

Response received from
Thorne Moorends Town Council (02/05/2019)
Brief summary of issues raised
Concerns raised over the potential impact the site will have on the nearby Thorne and Hatfield Moor. In addition concerns were raised to the risk the sites poses to the network of drains, ditches, canals and watercourses should any of the accepted wastes were to enter them.
Summary of actions taken or show how this has been covered
The site is situated a minimum of 1.2 km from the boundary of the named habitats. All activities will be carried out on impermeable surfacing with designated areas for storage and treatment. All treatment will be undertaken with the existing building. Liquid wastes will be stored in purpose built tanks which will be appropriately bunded. Clean surface water originating from roofs and gutters of buildings will be piped to an outside pond with an overflow to the Internal Drainage Board drainage system. Dirty water originating from the waste storage areas will be confined within the storage and processing area by raised kerbs, which drains to a dirty water lagoon. Dirty water will be tankered off site for disposal. We consider there is no direct pathway between the site and the named habitats and therefore expect any impact on the surrounding habitats to be minimal.

Representations from community and other organisations

Response received from
4R Steering Group (15/04/2019)
Brief summary of issues raised
Concerns raised over the increase in traffic, risk of odours and impacts to the environment.
Summary of actions taken or show how this has been covered
Comments regarding land use and impacts of traffic are matters for the land-use planning system and not considered under this permit application. All activities will be carried out on impermeable surfacing with designated areas for storage and treatment. All treatment will be undertaken with the existing building. Liquid wastes will be stored in purpose built tanks which will be appropriately bunded. Clean surface water originating from roofs and gutters of buildings will be piped to an outside pond with an overflow to the Internal Drainage Board drainage system. Dirty water originating from the waste storage areas will be confined within the storage and processing area by raised kerbs, which drains to a dirty water lagoon. Dirty water will be tankered off site for disposal. We consider there is no direct pathway between the site and the named habitats and therefore expect any impact on the surrounding habitats to be minimal. The site has an approved OMP which details the control and prevention of odour emissions on site. Please refer to the key issues section above for further details on odour.

Response received from
Limited Company
Brief summary of issues raised
A number of concerns were raised by the above organisation these are summarised as follows: • The use of sewage sludges to stabilise bypass dusts and cement kiln dusts; • The waste acceptance criteria in place for the acceptance of hazardous materials on site; • The limits of hazardous waste accepted at the site; • Concerns regarding the planning process; • Concerns regarding the condition of the process building and yard areas; • Concerns regarding the competency of the Technical Competent Manager (TCM) on site; and • Concerns regarding the quantities of waste accepted on site.
Summary of actions taken or show how this has been covered
The Operator has applied for a bespoke permit which allows the treatment of hazardous and non-hazardous waste materials. The concerns raised in the consultation response have been covered during our determination. The Operator has amended their application and will only stabilise by-pass dust and cement kiln dusts with clean water only. As discussed above we have approved the waste acceptance criteria for wastes accepted on site. Before any wastes can be accepted on site the Operator is required to submit confirmation that the process building and yard areas are in a satisfactory state. The details of the TCM provided are appropriate for the activities carried out on site and wastes accepted on site. Any concerns regarding the planning process fall outside the scope of the Environment Agency and are considerations for East Riding of Yorkshire Council.

Response received from
Limited Company
Brief summary of issues raised
Concerns raised regarding the location of the site in relation to the sensitive habitats and the types of waste being brought on to site for treatment and storage.
Summary of actions taken or show how this has been covered
All activities will be carried out on impermeable surfacing with designated areas for storage and treatment. The majority of treatment will be undertaken with the existing building. Liquid wastes will be stored in purpose built tanks which will be appropriately bunded. Clean surface water originating from roofs and gutters of buildings will be piped to an outside pond with an overflow to the Internal Drainage Board drainage system. Dirty water originating from the waste storage areas will be confined within the storage and processing area by raised kerbs, which drains to a dirty water lagoon. Dirty water will be tankered off site for disposal. We consider there is no direct pathway between the site and the named habitats and therefore expect any impact on the surrounding habitats to be minimal. Wastes which are accepted on site will be stored either internally or externally once treated. All deliveries of waste will adhere to strict waste acceptance criteria. Wastes will only be accepted if there is a clear treatment and storage plan. All wastes will be sampled and analysed prior to being accepted on site.

Response received from
Keep me Rural
Brief summary of issues raised
A number of concerns were raised by the above organisation these are summarised as follows: • Concerns regarding the increase in road traffic and risk to local residents; • Increase risk of flooding; • Contamination of the groundwater; • Contamination of surrounding areas including the protected habitats; and • Concerns over the land planning system.
Summary of actions taken or show how this has been covered
Any concerns regarding an increase in traffic and the associated impacts to local residents have not been considered as part of this application. Decisions about land use and impacts of traffic are matters for the land-use planning system. Please refer to the responses below with regard to flooding, contamination of groundwater and impacts on the listed protected habitats.

Representations from individual members of the public.

Brief summary of issues raised
A number of the responses received as part of the initial consultation surround the risk of odour from the site.
Summary of actions taken or show how this has been covered
The operator has provided an Odour Management Plan (OMP) which has been approved for the activities to be undertaken on site. The OMP is details the potential sources of odour, control and prevention measures and monitoring and management procedures in place. By implementing the measures listed within the OMP the operator has taken appropriate measures to reduce the impact of odour to the sensitive receptors in the local area. See key issues of this decision document for more information.

Brief summary of issues raised
A number of the responses received as part of the initial consultation surround the impact of an increase in traffic as a result of delivering and removing materials from the site.
Summary of actions taken or show how this has been covered
All comments regarding traffic and the proposed increase in traffic as a result of lorries delivering and collecting materials to and from the site have not been considered as part of this application. Decisions about land use and impacts of traffic are matters for the land-use planning system.

Brief summary of issues raised
A number of the responses received as part of the initial consultation made reference as to whether the site was an appropriate use of the land.
Summary of actions taken or show how this has been covered
Comments regarding the location of the site and the suitability of the land have not been taken into consideration during the determination of this variation. These considerations are for planning with East Riding of Yorkshire Council and fall outside the scope of the Environment Agency's environmantal permtting process.

Brief summary of issues raised
A number of the responses received as part of the initial consultation made reference to the impact the site will have on flooding in the surrounding area.
Summary of actions taken or show how this has been covered
The site is surfaced with an impermeable surface with uncontaminated surface water originating from roofs and guttering draining to the clean water pond to the east of the site. The overflow from the pond will drain into the surrounding land drains at a maximum rate of 10 l/s via an orifice plate. Contaminated runoff from the yard area and the process building will drain to the dirty water lagoon which has a maximum capacity of 400 m3 with a minimum of 50% capacity retained at all times. The containment capacity of the bunded yard area is calculated at 374 m3. The containment capacity on site has been calculated to exceed the runoff created during a 1 in 100 year storm of a 60 hour duration, with a 40% uplift to allow for climate

change.

The Lead Local Flood Authority and Internal Drainage Board were consulted on but no responses were received.

Brief summary of issues raised
A number of the responses received as part of the initial consultation made reference to the impact the site will have on human health on the local population.
Summary of actions taken or show how this has been covered
As part of our 'working together agreements' we consulted with Public Health England, the Department of Public Health at East Riding Council and the Environmental Health department at East Riding council. We only received a consultation response from Public Health England, the summary of the issues raised and the actions taken are detailed above. The summary of the response from PHE is they have no concerns regarding the risk to health of the local population. This is based on the assumption that the permit holder shall take appropriate measures to prevent or control pollution, in accordance with relevant sector guidance and industry best practice. We are satisfied that the permit does not increase the risk to human health for the reasons set out in this decision document.

Brief summary of issues raised
A number of the responses received as part of the initial consultation made reference to the impact the site will have on the surrounding groundwater and surface water.
Summary of actions taken or show how this has been covered
All activities will be carried out on impermeable surfacing with designated areas for storage and treatment. The majority of treatment will be undertaken within the existing building, following improvements. Liquid wastes will be stored in purpose built tanks which will be appropriately bunded. Clean surface water originating from roofs and gutters of buildings will be piped to an outside pond with an overflow to the Internal Drainage Board drainage system. Dirty water originating from the waste storage areas will be confined within the storage and processing area by raised kerbs, which drains to a dirty water lagoon. Dirty water will be tankered off site for disposal. Wastes which are stored outside within the yard area will be within designated bays and covered preventing any windblown wastes from entering the surrounding watercourses. The Operator has committed to ensuring that the borehole (SE71NE3) is appropriately protected prior to undertaking any activities on the site to ensure there is no contamination of the groundwater from the onsite activities. We have included a Pre-Operational Measure (PO1) for the Operator to provide evidence that the borehole has been protected prior to accepting waste on site. We are satisfied that the Operator has taken appropriate measures to ensure that there will be no contamination of the groundwater.

Brief summary of issues raised
A number of the responses received as part of the initial consultation made reference to the impact the site will have on the local air quality surrounding the site.
Summary of actions taken or show how this has been covered

Due to the location of the site, the site is unable to link to the National Grid. As such the site will use a diesel generator to provide power to the welfare facilities on site including the site office, pumps and the electrical mixer on site. The generator will be housed within the plant room with an exhaust vented to the external wall. The generator will have a maximum thermal input power of 390 kW, if run at 100% capacity.

Please refer to the key Issues section above for further details regarding the onsite generator.

As part of our 'working together agreements' we consulted with Public Health England, in summary PHE have no concerns regarding the risk to health of the local population. This is based on the assumption that the permit holder shall take appropriate measures to prevent or control pollution, in accordance with relevant sector guidance and industry best practice.

Impacts to air quality from the movement of vehicles off site in the delivery and collection of materials to and from site have not been considered within this application. Decisions about land use and impacts of traffic are matters for the land-use planning system.

We are satisfied that the Operator has taken appropriate measures to ensure that impacts on the local air quality will be minimal.

Brief summary of issues raised

A number of the responses received as part of the initial consultation made reference to the impact the site will have on the surrounding protected habitats.

Summary of actions taken or show how this has been covered

The site is situated a minimum of 1.2 km from the boundary of the following protected habitats:

- Thorne, Crowle and Goole Moors Site of Special Scientific Interest (SSSI);
- Thorne Moor Special Area of Conservation (SAC); and
- Thorne and Hatfield Moors Special Protection Area (SPA).

All waste will be treated on an impermeable surface within the process building with treated wastes either stored within the process building or in the external yard area which will also be an impermeable surface. All contaminated water from the process building and leachate from the storage areas will drain to the dirty water lagoon which will be emptied and treated at a designated facility. Treated waste stored externally will be within bays which will be enclosed on three sides with a curtain on the front. The covering of bays will prevent any materials from being blown from the site into the designated areas.

See key issues of this decision document for more information.

We are satisfied that the Operator has taken appropriate measures to ensure that impacts on the named protected habitats will be minimal.

Brief summary of issues raised

A number of the responses received as part of the initial consultation made reference to the noise the site will produce and impact this will have on the surrounding areas.

Summary of actions taken or show how this has been covered

The majority of the activities undertaken on site will be undertaken within the process building, the doors to the process building will be kept closed during the unloading of vehicles and processing of waste. The site will operate a single piece of plant equipment, in conjunction with the mixer. The majority of the noise will be confined to the process building. The operating hours of the site will be restricted as part of the planning application. All plant and machinery will be operated and maintained in accordance with the manufacturer's

instructions.

The site is located 525 m from the nearest sensitive receptor.

We have included the standard noise permit conditions (conditions 3.4.1 & 3.4.2) into the permit these require the Operator to ensure that emissions from the site are free from noise and vibration levels likely to cause pollution. The condition also allows the site officer to request a noise and vibration management plan should the need arise.

We are satisfied that the Operator has taken appropriate measures to ensure that impacts from noise and vibration will be minimal.

Brief summary of issues raised
A number of the responses received as part of the initial consultation made reference to the likely increase of vermin and pests (including flies) due to activities and wastes accepted at the site.
Summary of actions taken or show how this has been covered
All wastes will arrive on site either in sheeted/covered lorries or sealed containers. All deliveries will be subject to the waste acceptance checks, wastes not conforming will be rejected from the site. Wastes will be treated within the enclosed process building. Once treated the potential food sources within the waste will significantly reduce, thus reducing the risk from pests and vermin. To reduce the risk of flies wastes will arrive on site having under gone an element of treatment and therefore breaking the life cycle. Waste deliveries with a high risk of containing flies or fly larvae will be quarantined and treated with insecticide. The Operator has confirmed that contracts will be in place with approved pest control contractors to provide monitoring services to the site. We have included the standard pest permit condition (conditions 3.5.1 & 3.5.2) into the permit these require the Operator to ensure that activities undertaken on site do not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance beyond the site boundary. The condition also allows the site officer to request a pest management plan should the need arise We are satisfied that the Operator has taken appropriate measures to ensure that impacts from noise and vibration will be minimal.

Brief summary of issues raised
A number of the responses received as part of the initial consultation made reference to the competency of the operator.
Summary of actions taken or show how this has been covered
As part of the application the Operator has provided sufficient proof that the site will be manned by a technically competent manager (TCM) who has the relevant qualifications for the storage and treatment of the materials accepted on site. We are satisfied that the operator is technically competent and the site will be managed by an appropriate competent manager.

Brief summary of issues raised
A number of the responses received as part of the initial consultation made reference to the suitability of materials accepted at the site and the process undertaken.
Summary of actions taken or show how this has been covered

All of the wastes which are accepted at the site are only wastes which will be eligible for spreading for agriculture or ecological benefit under the following Standard Rule permits; SR2010No4, SR2010No5 & SR2010No6 under Environmental Permitting Regulations, Sludge (Use in Agriculture) Regulations and Sludge Code of Practice and PAS100/PAS110 and associated Quality Protocols or the Operators Bespoke landspreading permits.

The activities undertaken on site and the majority of the wastes codes accepted at the site are listed under the our Standard Rules 2008 No19, Standard Rules 2015 No6 and Standard Rules 2010 No17. The remaining wastes which are not listed within the Standard Rule permits will only be treated under the activities listed within the Standard Rules permits. The waste codes which are not listed under the above Standard Rules Permits are wastes which have be assessed as suitable for the activities due to be undertaken at the site.

The determination focuses solely on the storage and treatment of wastes on site, the suitability of wastes after treatment have not been considered as part of this application. The suitability of wastes which do not appear on the land spreading standard rules permits or on the Operator's current bespoke permits for land application will be required to be assessed as part of future applications made by the Operator for land spreading.

All wastes accepted on site will be subject to the waste acceptance criteria proposed by the operator. Please see the Key issues section above for further details on the waste acceptance and treatment of waste.

We are satisfied that the operator will undertake activities on site that are suitable for the wastes they are accepting

Brief summary of issues raised
A number of the responses received as part of the initial consultation made reference to the impact the lights of site will have on the surrounding area.
Summary of actions taken or show how this has been covered
Comments regarding the light pollution from the site have not been taken into consideration during the determination of this variation. This is a planning consideration for planning with East Riding of Yorkshire Council and fall outside the scope of the Environment Agency.

Advertising and Consultation on the Draft Decision

This section reports on the outcome of the public consultation on our draft decision carried out between 17 August 2020 and 21 September 2020.

In some cases the issues raised in the consultation were the same as those raised previously and already reported in the above section of this decision document. Where this is the case, the Environment Agency response has not been repeated and reference should be made above for an explanation of the particular concerns or issues.

Also some of the consultation responses received were on matters which are outside the scope of the Environment Agency's powers under the Environmental Permitting Regulations. Our position on these matters is as described previously.

No response were received from the following organisations;

- Food Standards Agency;
- Local planning Authority – East Riding Council;
- Department of Public Health – East Riding Council;
- Lead Local Flood Agency;
- Internal Drainage Board; and
- Animal, Plant Health Agency.

Responses from organisations listed in the consultation section

Response received from
East Riding of Yorkshire Council - Environmental Control (18/09/2020)
Brief summary of issues raised
No concerns were raised regarding the draft permit
Summary of actions taken or show how this has been covered
N/A

Response received from
Public Health England (25/09/2020)
Brief summary of issues raised
No concerns were raised regarding the draft permit
Summary of actions taken or show how this has been covered
N/A

Representations from local MP

Response received from
Mr Percy (MP) (21/09/2020)
Brief summary of issues raised
The main points raised by Mr Percy relate to the risk of contamination from airborne and warterborne pollutants on the local residents in addition to the odour and noise arisng from the site. In addition to comments regarding the risk the site poses to the SAC & SPA sites.
Summary of actions taken or show how this has been covered
All of the points raised in Mr Percy's consultation response have previously been covered in our determination and are detailed in the Key Issue section above.

Responses to comments made during the minded to consultation

Brief summary of issues raised
A number of the responses received as part of the minded to consultation raised concenrs over the potential transmission of Covid-19 through the use of sewage sludge.
Summary of actions taken or show how this has been covered
The Environmnet Agency is following the advise issued by the World Health Organisation (WHO). In summary the WHO have advised that, to date there is no evidence that the Covid-19 virus has been transmitted via sewerage systems with or without wastewater treatment. This advice gives us confidence that Covid-19 does not necessitate additional controls above those best practices which are already used in the supply and use of sludge in agriculture. All wastes accepted on site will be subject to the waste acceptance criteria proposed by the operator. Please see the Key issues section above for further details on the waste acceptance and treatment of waste. We are satisfied that the operator will undertake activities on site that are suitable for the wastes they are accepting.

Brief summary of issues raised
A number of the responses received as part of the minded to consultation made reference to the recent Environment Agency report 'strategy for safe and sustainable sludge use'
Summary of actions taken or show how this has been covered
It should be noted that the report relates to changes to the Sludge Use in Agriculture Regualations (SUiAR) which covers the application of sludge to land. As previously discussed above, the permit is for the treatment and storage of wastes only. The permit does not allow the application of waste to land, all wastes which are accepted and subsequently treated on the site will require the appropriate assessment and authorisation prior to spreading to land.

Brief summary of issues raised
A number of the responses received as part of the minded to consultation made reference to the condition of the site and concerns regarding the containment of dirty water on site.
Summary of actions taken or show how this has been covered
The permit includes two pre-operational measures for future development (POFD1 & POFD2) which relate to the acceptance of wastes on site for treatment and storage. Before any liquid or solid wastes can be received at the site, the Operator is required to submit evidence to the Environment Agency that the site surface, including the surface in the process building is repaired and confirmed to be impermeable and the process building is in a fit state of repair and suitable for the treatment of wastes. With regard to the containment of the site we are satisfied with the proposal submitted by the Operator. The pre-operational measures (POFD1 & POFD2) require the Operator to provide eveidence to demonstrate the integrity of the poposed containment for on site contanimanted water prior to accepting waste for treatment of storage. In addition the Operator will also follow a regular inspection and maintenance programme.

Brief summary of issues raised
A number of the responses received as part of the minded to consultation made reference to the potential impact the site could have on the protected habitats.
Summary of actions taken or show how this has been covered
As discussed in our previous response and key issues section above the distance between the site and the named habitat is a minimum of 1.2 km this is as per our GIS software and Magic Map. Our screening distance for this type of site is 1 km. Although the distance between site and the boundary of the habitat is outside of our screening distance we undertook a habitats risk assessment, which screened the impact of the site on the named habitat out as 'insignificant'. A number of responses received detail the distance to be closer than 1.2 km. We are are confident in the measure ment of 1.2 km, however if the site was within our screening distance our assessment would still conclude that the site would have no 'significant impact' on the named habitat. Please refer to the Key Issues section above.

Brief summary of issues raised
A number of the responses received as part of the minded to consultation made reference to how the consultation was carried out.
Summary of actions taken or show how this has been covered
The minded to consultation was advertised on Citizen Space from 17 August to 21 Sepember 2020. The draft permit and decision document were advertised for a total of 35 days. An additional seven days were added to the required 28 day consultation period to account for impact of the Coronavirus pandemic and that the consultation was during the summer holiday period. In addition to the extended consultation period, members of the public who had previously contacted us as part of the initial consultation and provided an email address were contacted directly to make them aware of the minded to consultation.

Summary

The application has been subject to a full and robust determination in accordance with Environment Agency policy and operational procedures, including publication of the application. The outcome of this determination is to grant the permit.