

Permitting decisions

Variation

We have decided to grant the variation for Earls Barton Fridge Recycling Facility operated by Davis Commercial Services Ltd.

The variation number is EPR/EB3100HN/V002.

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

Purpose of this document

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

- highlights [key issues](#) in the determination
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account
- shows how we have considered the [consultation responses](#)

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

Read the permitting decisions in conjunction with the environmental permit and the variation notice. The introductory note summarises what the variation covers.

Key issues of the decision

This variation varies the previously issued standard rule permit (SR2015 No 3) which following the publication of BREF¹ and BAT conclusions² in August 2018 the Environment Agency decided that the standard rules permit for the wastes treated at the site was not suitable.

After discussion with the Environment Agency, the operator applied to vary the standard rules permit within the agreed timescale, the application was received on 05 July 2019.

Treatment process undertaken

The applicant (now operator) accepts end of life commercial refrigeration units only, removing the refrigeration gasses and fluids, dismantling them by removing the refrigeration components, glass, metal and partially treating the foam to allow this and the other separated waste to be sent for further treatment elsewhere. However, fridge units containing ammonia are not treated on site but transferred to an authorised treatment facility for appropriate processing.

The operator will either just cut the foam (a minimum number of times) to facilitate the transportation to another site or to partially treated foam via the densification process, after which it is placed in a bag and sent off site for treatment or recovery.

We served a Schedule 5 notice requesting additional information to describe the extent of the treatment e.g. the cutting method used to reduce the size of the panels containing pentane. The operator stated that they shall only cut the panels to maximum size for ease of transportation (if being sent off site for further processing) or to the maximum size that can be treated in the densification process, therefore minimising the number of cuts required and the amount of gas liberated from the foam structure that requires collection³.

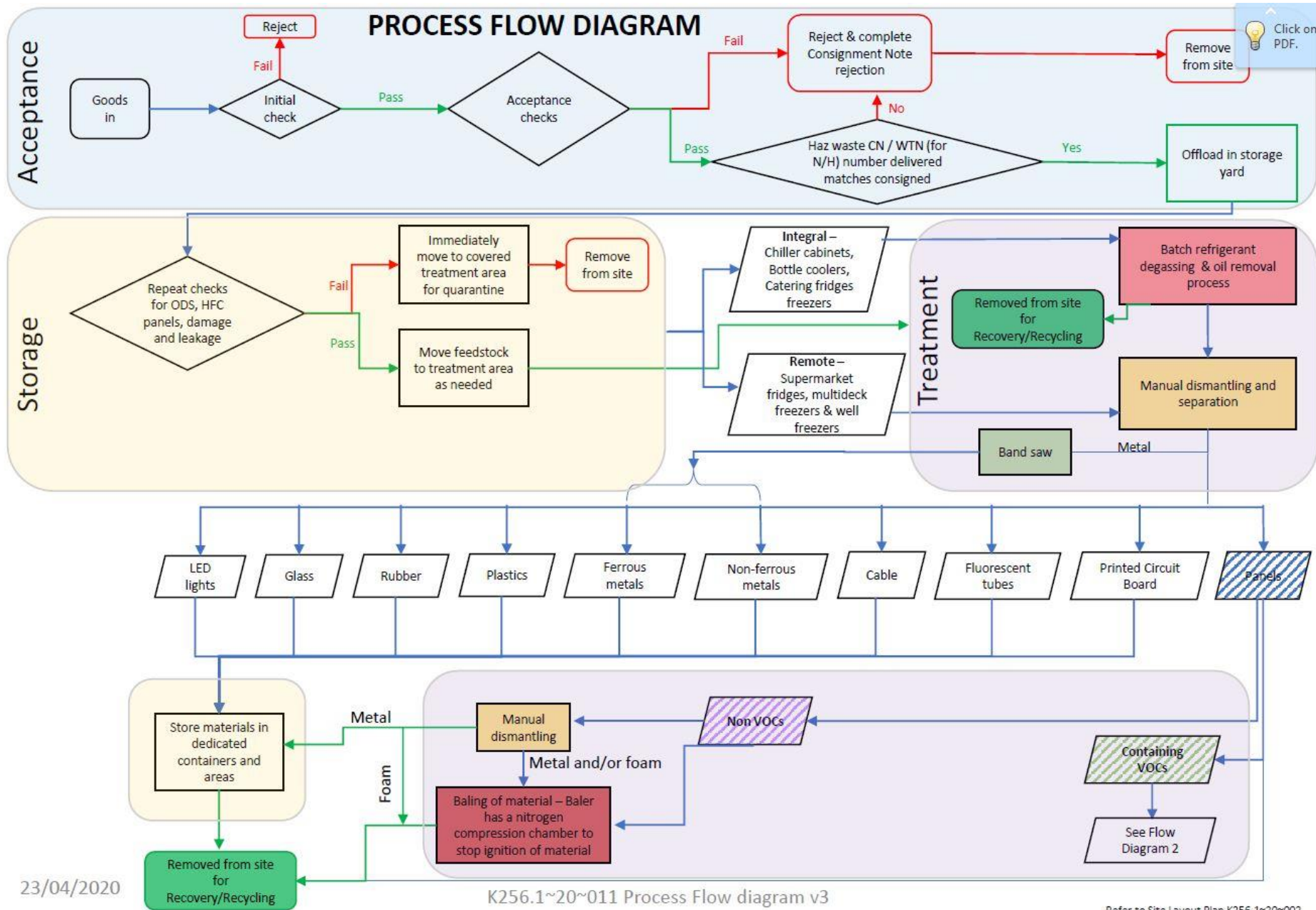
The operator is only processing commercial refrigeration units and will process them in the following way (also see process diagram below):

- a) Stage 1: Degassing, oil and fluid removal from the units ("integral" units) if these have not been degassed at source.
- b) Stage 2: Manual processing
 - i) Metal, glass and plastic will be removed and separated for recovery off site
 - ii) Metal and plastic removed from foam
 - iii) Size reduction of foam panels using intrinsic methods with extraction to minimise emissions.
- c) Stage 2: HC (hydrocarbon) foam treatment:
 - i) after size reduction, the foam panels will be placed on a pallet, wrapped and taken offsite to another permitted site for further recovery or destruction; or
 - ii) the panel blocks will be compressed in a contained atmosphere, packaged and taken offsite for either use as fuel or further treatment at another permitted site.
- d) Stage 2: Non-HC insulated foam treatment
 - i) after size reduction, the foam panels will be placed on a pallet, wrapped and taken offsite to another permitted site for further recovery or destruction; or
 - ii) the panel blocks will be compressed in a nitrogen atmosphere, packaged and taken offsite for either use as fuel or further treatment at another permitted site.

¹ Best Available Techniques (BAT) Reference (BREF) document for Waste Treatment updated 2018

² BAT conclusions (August 2018)

³ Response to Q2, Response to Notice of request for more information (K256.1~09~010), dated 13.03.20



23/04/2020

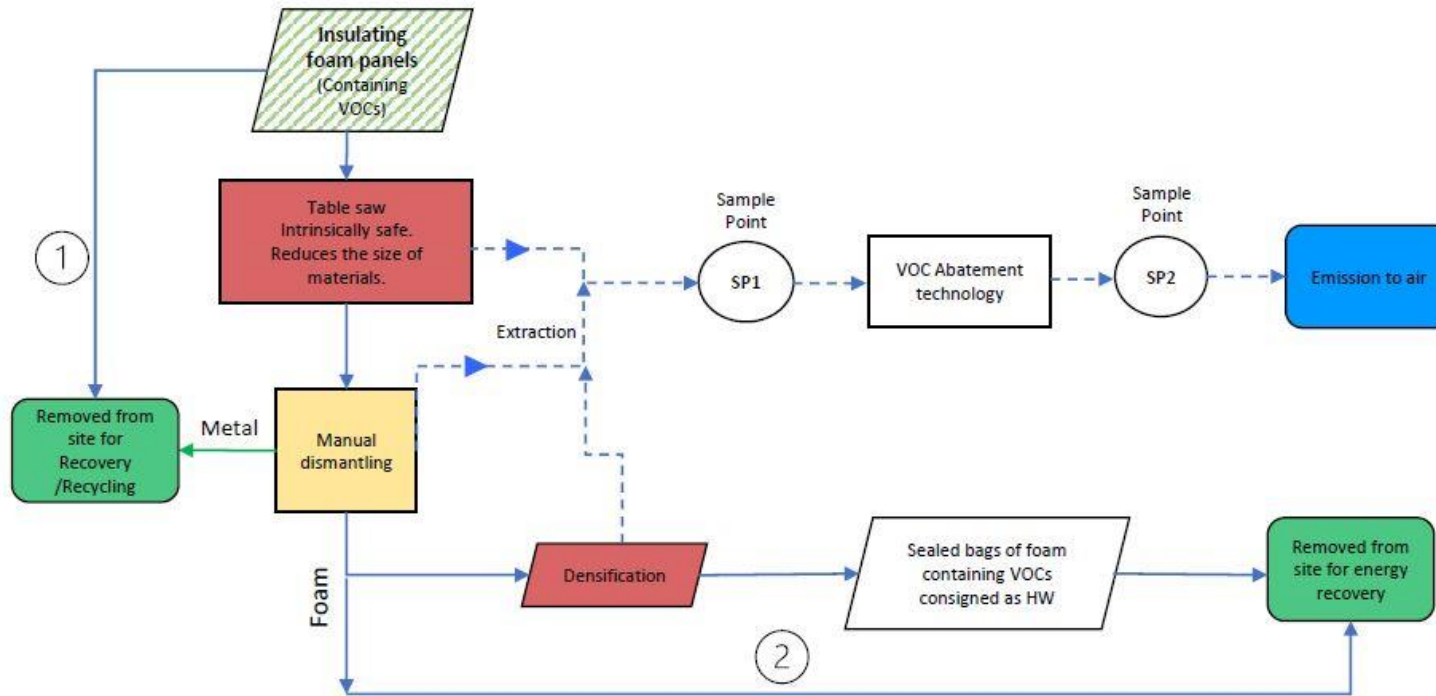
K256.1~20~011 Process Flow diagram v3

Refer to Site Layout Plan K256.1~20~002

Process Flow Diagram for Pentane Panels

NOTE

- ① Unseparated panels (metal & foam) may be removed from site where process, commercial, or treatment capacity requirements dictate, or where equipment is out of service or being maintained.
- ② Subject to process or commercial requirements foam, separated from metal, may be removed from site without passing through the densification process.



23/04/2020

K256.1~20~011 Process Flow diagram v3

Refer to Site Layout Plan K256.1~20~002

Air emissions

The operator has gathered a limited amount of monitoring data which was used to populate the H1 screening tool.

Although the H1 tool showed that the air emissions from the site were insignificant, we are not satisfied that sufficient quality data was gathered or available currently due to the revisions made to the air emission abatement system. Therefore, we have decided to require via pre-operational PO1 and improvement conditions IC 03, 04 and 05 that the operator shall undertake commissioning of the abatement system, monitoring of the volatile organic carbon compounds (VOC's) during the commissioning and treatment processes and review the risk assessments. Depending on the results of the commissioning and again after the review we have required the operator to provide additional appropriate measures for the treatment of the air emissions, if necessary.

Fire Prevention Plan

The operator provided a fire prevention plan (FPP) as part of the application. We were not satisfied that this was in line with the Environment Agency Guidance⁴

We requested revisions be made to the FPP via Schedule 5 notices (dated 31/01/20 and 16/04/20).

The FPP largely meets the objectives and standards set out in the guidance, however, the operator has proposed alternative measures, these are as follows:

Specific risk reduction element	Detail of the alternative measure
Secure boundary	<p>The outside storage area is not a fully fenced area. It is surrounded by a 2 m bund on 2 sides. The bund is very steep and the storage immediate pad/area is fenced with a mixture of chain-link, palisade and Heras fencing. See Site Layout plan (K256.1~20~003).</p> <p>We are satisfied that the site will remain secure, however we have required the operator via improvement condition (IC07) to propose additional security measures for the outside storage area that comply with the standards in the Environment Agency Fire Prevention guidance.</p>
Carry out a fire watch at regular intervals during the working day to detect signs of fire	<p>Vehicles depositing and transferring end of life (EoL) fridges in the building will remain at least 6m from all combustible wastes when not in use. This will be checked daily. Operators will ensure that at no point are EoL fridge storage areas subject to prolonged exposure to hot exhausts. No other vehicles are used within the main processing building except for forklifts.</p> <p>There are checks to ensure dust has not settled on hot plant and equipment surfaces and that any potential ignition sources are safe and away from combustible materials This is checked daily.</p>
Take into account external heating during hot weather and consider shading from direct sunlight or using other techniques to enable heat generated within the pile to be released.	<p>Although very unlikely to be an issue due to high turnover of waste, in hot weather additional daily monitoring will be undertaken.</p>
Contain the run-off from fire water to prevent pollution of the environment. Containment volumes should be shown to be in accordance with water supply calculations. Include	<p>Use inflatable barriers, drain blockers and covers to prevent waters escaping from the site. 250 mm kerb in outdoor storage area to control area.</p>

⁴ Fire Prevention Plan guidance - <https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits>

Specific risk reduction element	Detail of the alternative measure
<p>secondary and tertiary containment facilities for fire water run-off. Can combustible wastes be stored on hard standing rather than an impermeable surface with sealed drainage? If so, has the FPP assessed the potential effect of fire water on receptors?</p>	<p>A 0.5 m dam of sandbags and plastic sheeting across the entrances to provide containment capacity within the building.</p> <p>“Drainblok” tool will be used to block surface water drains, also “Dammit” emergency clay drain mats will be used to cover drains. Staff are trained to deploy these in an emergency. Surface water drains are shown on Site Layout Plan K256.1~20~002.</p> <p>We requested additional information via Schedule 5 notices. The operator answered these satisfactorily, confirming the staff training, inspection and maintenance of the sandbags, sheeting and drain coverings which will be check on a weekly basis.</p> <p>As a precautionary measure and as the above are manual tools we have included an improvement condition (IC07) requiring the operator to propose further measures for a more permanent solution to containing the firewater in the building and/or in the yard area over an agreed timescale.</p>
<p>Suppression systems should be proportionate to the risk on site. Suppression may be in place for external waste storage and must be in place for internal waste storage. Suppression methods can be automated or manual, ranging from fire blankets to automated systems. You must make sure the design, installation and maintenance of all your automated suppression equipment is covered by an appropriate UKAS-accredited third party certification scheme.</p>	<p>Suppression system has been installed on the electrical fuse box as recommended by FRS.</p> <p>Otherwise the site is reliant on the FRS to suppress a fire who are local and can be at the site within 5 to15 minutes.</p> <p>We are satisfied that this is proportionate due to the close proximity to the local Fire and Rescue Service and the operator has a staff presence on site at all times. Additionally, a supervisor will be on call to attend and assist them in the event of an incident.</p>

The operator submitted a revised version of the FPP (K256.1~09~007 V3) which has been incorporated into Table S1.2 – Operating Techniques.

Surface Water

The site lies directly on the Northampton Sand Ironstone which is a Secondary A Aquifer which will provide base flow to watercourses in the area. We assessed the site to be on a groundwater divide between the Swanspool Brook to the north and some springs/issues to the south but would suggest it probably flows in a northerly direction towards the brook due to its proximity. We estimate there will be an unsaturated zone in excess of 10m, so the discharge via soakaway will have attenuation potential.

From the documents submitted only 10% of the fridges will contain hydrocarbons and all the storage areas are impermeable with sealed drainage to an interceptor which then discharges to ground. Based on this we would assess the activity to have a medium risk to pollute groundwater.

Within the application, the operator proposed the monitoring and the setting of trigger levels for the interceptor discharge which has been formalised in improvement conditions IC 01 and IC02. The improvement conditions include the need for a risk assessment and to provide mitigation measures if needed which gives the Environment Agency additional controls if the discharge is more polluted than expected. Therefore, we have decided to take a precautionary approach and require the operator to only discharge the water from the tank with our permission or have the water removed from site by tanker until they have completed the requirements of IC 01 and 02 and received our approval.

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.
Consultation	
Consultation	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <ul style="list-style-type: none"> • Northamptonshire County Council – Development Control • Northamptonshire County Council – Director of Public Health • Northamptonshire County Council – Fire & Rescue Service • Wellingborough Council – Environmental Protection Team • Public Health England • Health and Safety Executive <p>No responses were received were received from:</p> <ul style="list-style-type: none"> • Northamptonshire County Council – Development Control • Northamptonshire County Council – Director of Public Health • Northamptonshire County Council – Fire & Rescue Service • Wellingborough Council – Environmental Protection Team • Health and Safety Executive <p>The comments from Public Health England are summarised in the consultation section.</p>
The facility	
The regulated facility	<p>We considered the extent and nature of the facilities 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', and guidance on permits.</p> <p>The extent of the facilities are defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.</p>

Aspect considered	Decision
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 including the discharge points The plan is included in the permit.
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports.
Biodiversity, heritage, landscape and nature conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <p>We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.</p>
Environmental risk assessment	
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is unsatisfactory and required additional Environment Agency assessment.</p> <p>Although the risk assessment (H1) showed that the emissions to air, water and land would not be significant, it was based on limited datasets.</p> <p>Therefore, we have required the operator to gather further data and revise the risk assessment (H1) – see improvement conditions below.</p>
Operating techniques	
General operating techniques	<p>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.</p> <p>The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.</p>
Operating techniques for emissions that screen out as insignificant	<p>Emissions particulates and VOC's of have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation. However, as the risk assessment (H1) was based on limited datasets, so as a precaution we have required the operator to gather further data and revise the risk assessment (H1) – see improvement conditions below.</p> <p>We consider that the emission limits included in the installation permit reflect the BAT for the sector.</p>

Aspect considered	Decision
Fire prevention plan	<p>We have assessed the fire prevention plan and are satisfied that it meets the measures and objectives set out in the Fire Prevention Plan guidance. The plan also sets out alternative measures that we consider meet the objectives of the Fire Prevention Plan guidance. Please see further details in key issues.</p> <p>To ensure that a long term solution to the containment of firewater is put in place, we have set an improvement condition (IC07) to allow the operator time in which to implement a permanent solution to the containment of the firewater in the building.</p>
Permit conditions	
Use of conditions other than those from the template	<p>Based on the information in the application, we consider that we need to impose conditions other than those in our permit template.</p> <p>The operator is undertaking the dismantling of commercial fridges, rather than the total destruction of the units. Therefore, we have amended the following parts of the template:</p> <ul style="list-style-type: none"> • Table S1.5 – the template wording is not suitable for the type of operation being undertaken at the site, as it differs from what is described in the template. The operator only deals with commercial units and only a small number of these have machinery and cooling systems within a unit. Therefore, the operator undertakes the Stage 1 processing (de-gassing) in a similar manner to a fridge destruction site, however, in Stage 2 they dismantle the units manually and either reduce the size of the insulation panels or subject them to a densification process in a contained atmosphere. Therefore we have re-written the standards to control the dismantling, size reduction and the densification of the insulation panels. • Table S3.3 – As the operator is not processing oil for the cooling systems, the requirement for this to be monitored has been removed. • The motioning of the contained environment has been changed to monitoring “Contained environment within Stage 2 treatment area and extraction and abatement system” as the operator is not fully destroying the refrigeration units. • Appendix B, Reporting form – As the operator only accepts commercial fridges and the amounts of gas present in these differs from other types of unit. We have removed these standard limits and imposed an improvement condition (IC 10) for the operator to agree the appropriate amount with the Environment Agency prior to submitting the first report.
Waste types	<p>We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.</p> <p>We are satisfied that the operator can accept these wastes for the following reasons:</p> <ul style="list-style-type: none"> • they are suitable for the proposed activities;

Aspect considered	Decision
	<ul style="list-style-type: none"> • the proposed infrastructure is appropriate; and • the environmental risk assessment is acceptable. <p>We made these decisions with respect to waste types in accordance with SGN 5.06 - Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste and WM3 - Guidance on the classification and assessment of waste (1st Edition v1.1).</p>
Improvement programme	<p>Based on the information on the application, we consider that we need to impose an improvement programme.</p> <p>We have imposed an improvement programme as detailed below:</p> <p>IC01 and 02 – We required the operator to obtain an appropriate dataset and revise the H1 assessment to establish the emission limits and monitoring requirements. No discharge to land is to be allowed until the operator has completed improvement conditions and agreed the emission limits and monitoring or other appropriate measures with the Environment Agency.</p> <p>IC03, 04 and 05 – Please see details in ‘Air Emissions’ section in key issues.</p> <p>IC06 – We required the operator to submit a report detailing a Leak Detection and Repair (LDAR) Programme to ensure that the operator has a structured approach to reduce fugitive emissions as required but the Waste Treatment BATc.</p> <p>IC07 – Please see details in the ‘Fire Prevention Plan’ section in key issues.</p> <p>IC08 – We required the operator to submit a report detailing a tracking system to ensure that they can accurately track and quantify the amount of waste processed through the site, that is on the site at any one time and measure compliance with the FPP.</p> <p>IC09 – Please see details in the ‘Fire Prevention Plan’ section in key issues.</p> <p>IC10 – We required the operator to submit a report detailing the amount of blowing agent in each type of refrigeration unit as the operator only processes commercial refrigeration unit and the standard weights in the Appendix B reporting form are not applicable.</p>
Pre-operational conditions	<p>Based on the information in the application, we consider that we need to impose a pre-operational condition (PO1).</p> <p>We have required the operator to submit a commissioning plan to ensure the air abatement system is installed and commissioned in line with that plan.</p>
Emission limits	<p>ELVs and equivalent parameters or technical measures based on BAT have been added for the following substances.</p> <p>Total Suspended particulates – 10 mg/m³</p> <p>Total Volatile Organic Carbon (TVOC) – 15 mg/m³</p>

Aspect considered	Decision
	<p>ELV's for the emissions to land will be set via improvement condition (IC01 and 02) once an appropriate dataset has been established. No discharge is to be allowed until the operator has completed improvement conditions and agreed the emission limits and the monitoring.</p>
Monitoring	<p>We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified:</p> <p>Total Suspended particulates – 10 mg/m³</p> <p>Total Volatile Organic Carbon (TVOC) – 15 mg/m³</p> <p>These monitoring requirements have been imposed in order to ensure compliance with the associated emission limit and or quantify the amount being emitted from the facility in order to gather data to allow the setting of ELVs in the future.</p> <p>We made these decisions in accordance with SGN 5.06 - Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste and Control and monitor emissions for your environmental permit (https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit).</p> <p>Based on the information in the application we are not fully satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate. As part of the improvement conditions the monitoring we have required that the operator ensure that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.</p> <p>Monitoring for the emission to land will be set via improvement condition (IC01 and 02) once an appropriate dataset has been established. No discharge to land is to be allowed until the operator has completed improvement conditions and agreed the emission limits and the monitoring or suggested other appropriate measures.</p>
Reporting	<p>We have amended reporting in the permit for the following parameters:</p> <p>Emissions to air – quarterly</p> <p>Noise – as required by the noise management plan</p> <p>Emission to land – to be set via improvement condition (IC01 and 02) once an appropriate dataset has been established.</p> <p>We made these decisions in accordance with SGN S5.06 – Guidance for the recovery and Disposal of Hazardous and Non Hazardous Waste and Control and monitor emissions for your environmental permit (https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit)</p>
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.
Technical competence	Technical competence is required for activities permitted.

Aspect considered	Decision
	<p>The operator is a member of an agreed scheme.</p> <p>We are satisfied that the operator is technically competent.</p>
Relevant convictions	<p>The Case Management System and National Enforcement Database has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.</p>
Financial competence	<p>There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.</p>
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	<p>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.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“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.”</p> <p>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.</p> <p>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.</p>

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.

Responses from organisations listed in the consultation section

Response received from
Public Health England
Brief summary of issues raised
Based on the information contained in the application supplied to Public Health England, they confirmed that they had no significant concerns regarding the risk to the health of the local population from the installation. However, the consultation response assumes that the permit holder shall take all appropriate measures to prevent or control pollution, in accordance with the relevant sector guidance and industry best practice.
Summary of actions taken or show how this has been covered
We are satisfied that the operator will take appropriate measures or we have required, via improvement conditions, the operator revised the appropriate measures if necessary.