

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Cranswick Convenience Foods-Sutton Fields operated by Cranswick Convenience Foods Limited.

The permit number is [EPR/KP3733AN](#)

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:

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

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

Structure of this document

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

Key issues of the decision

Summary

Cranswick Convenience Foods – Sutton Fields is a mixed meat processing and packaging plant, producing ready to eat, cooked meat products. The facility is located on the Sutton Fields Industrial Estate which lies approximately 3km north of the city of Hull. The site has been operated by Cranswick Convenience Foods Limited since 2011. The site has recently undergone an extension that has increased the throughput by approximately 20%. The increase in throughput means the site is now above threshold and falls under the scope of the Environmental Permitting Regulations.

The site produces around 200,000 tonnes of cooked, chilled and sliced meat per year. Raw materials, made up of meat and other food ingredients, are brought onto site and unloaded into a refrigerated goods area where they are checked for quality, temperature and quantity. The raw materials are then stored in chilled storage prior to being processed.

Fresh and frozen meat products, such as beef, pork and chicken, are mixed or marinated before cooking. Cooking takes place on site, in one of 21 steam ovens. The food processing machinery used includes blenders, tumblers, mincers, conveyors, cookers, slicers and packing machines. Once cooked, in order to extend the shelf life, meat products are packed into modified atmosphere packaging. Despatch of the finished product is undertaken from the despatch area using refrigerated transport to various regional distribution centres.

Site condition report

The applicant provided a site condition report which contains information on the previous land use and details of the geological setting of the site.

The site is located on an area underlain by Upper Cretaceous chalk. Quaternary deposits of alluvium and flat deposits of clay, silt and sand overlie the chalk deposits. The nearest open watercourse is the River Hull, approximately 500m south of the site boundary.

Historically the site was open agricultural land up until the development of the Sutton Field Industrial site on the surrounding fields in the 1980's. In 2006 the factory location was developed into a storage facility. No groundwater or soil samples have been taken. The operator has stated that the site has not been subject to any historical uses which will have caused pollution to the ground beneath the factory. The whole permitted area is paved with an impermeable layer of concrete.

We agree that, as the site has adequate surfacing and pollution prevention measures. The materials and the quantity handled on site pose a low pollution risk, therefore there is a low risk of pollution to soil and groundwater. A condition has been included to require periodic monitoring of soil and groundwater to be undertaken, unless the operator demonstrates that this is not necessary based on a systematic assessment of the risk. This means that

the risk assessment will be revisited at least every five years, if not more frequently.

Best Available Techniques (BAT) Assessment

Table 1 compares indicative BAT taken from the Food and Drink Sector Guidance Note Environmental Permitting Regulations (EPR) 6.10, and the measures proposed in the supporting information of the application.

Table 1 Comparison of Indicative BAT with key measures proposed by the operator	
Indicative BAT	Key measures proposed
Accident management	
<ul style="list-style-type: none"> • <i>Use automatic process controls backed up by manual supervision, both to minimise frequency of emergency situations and to maintain control during emergency situations.</i> • <i>Use techniques and procedures to prevent overfilling of tanks - liquid or powder.</i> • <i>Use measures to detect variation in effluent composition.</i> • <i>Ensure that gross fat, oil and grease (FOG) does not block drains.</i> • <i>Protect against spillages and leaks of refrigerants, especially ammonia.</i> 	<p>Preventative Planned Maintenance (PPM) is carried out on all refrigeration systems involving manual leak checks.</p> <p>No bulk storage on site for raw materials, only for potable water. Automatic level controls on Hygiene tank.</p> <p>Discharge to sewer under a trade effluent consent, no ELVs set in the permit.</p> <p>Grease traps in place, inspections carried out regularly and cleaned out if necessary. FOG's pumped from system by contractor approx every 3 months.</p> <p>Refrigerant leak detection not in place, see improvement programme (IC2).</p>
Energy Efficiency	
<ul style="list-style-type: none"> • <i>Recover heat from ovens.</i> • <i>Ensure efficient operation of the refrigeration system – consider heat recovery from refrigeration system, reducing heat load, efficient operation on part load and fast closing doors/alarms on chilled storage areas.</i> 	<p>Heat generated by refrigeration system is used to pre-heat water prior to entering the water heaters by heat exchangers to reduce energy consumption.</p> <p>Fast closing doors, curtains and air lock are in place on the chillers.</p>
Efficient use of raw materials and water	
<ul style="list-style-type: none"> • <i>Identify and evaluate opportunities</i> 	<p>The site recovers condensate but there is</p>

<p><i>for the recycling or reuse of water, taking into consideration hygiene issues and practical constraints.</i></p> <ul style="list-style-type: none"> • <i>Assess the potential environmental impact of raw materials and make substitutions where appropriate. Consider their degradation products when choosing cleaning materials. If caustic is used low mercury sodium hydroxide should be selected.</i> 	<p>little opportunity to reuse or recycle water. The standard condition for the efficient use of raw materials (1.3.1) has been included within the permit. This condition states that the operator shall 'take appropriate measures to ensure that raw materials and water are used efficiently in the activities'.</p> <p>The BAT assessment details that the environmental risk of raw materials is considered in their procurement of suppliers. The sodium hydroxide (caustic) used contains low or no levels of mercury.</p>
Avoidance, recovery and disposal of wastes	
<ul style="list-style-type: none"> • <i>Demonstrate that the chosen routes for recovery and disposal represent the best environmental option.</i> • <i>Schedule production to minimise product changeovers and clean downs.</i> • <i>Consider whether your packaging line efficiency can be improved.</i> 	<p>Meat waste -reused or transported to a rendering plant. Packaging waste – zero to landfill, waste segregated at point of creation, and baled for collection by specialist contractor. Materials unsuitable for baling is used as refuse derived fuel (RDF).</p> <p>Production is based on a customer demand process and planned to minimise product changeovers and number of clean downs required.</p> <p>Packaging line reviewed weekly by monitoring. Changes implemented if needed.</p>
Cleaning and sanitation	
<ul style="list-style-type: none"> • <i>Raw materials and product should be kept out of wastewater system.</i> • <i>Equipment design</i> • <i>Good housekeeping</i> • <i>Manual cleaning</i> 	<p>Catchpots have been welded in place with removable basket filters to prevent raw material entering the effluent stream.</p> <p>Ease of cleaning is considered when ordering new equipment as part of the procurement process.</p> <p>Good housekeeping is maintained by reducing waste of raw material and maximise usage. Trays are placed to catch spilt meat.</p> <p>Dry cleaning is carried out and all spilt material is picked up prior to wash down. Flush through is used on some</p>

<ul style="list-style-type: none"> • <i>Sanitisation</i> 	<p>equipment.</p> <p>Cleaning of the process machinery and building fabric is undertaken using food grade chemicals.</p>
Emissions and monitoring	
<p><i>Point source emissions to air:</i></p> <p><i>Point source emissions to water:</i></p> <p><i>Keep raw materials and product out of the wastewater system wherever possible. The following techniques should be used:</i></p> <ul style="list-style-type: none"> • <i>dry clean-up</i> • <i>installation of drain catchpots and screens</i> 	<p>General ventilation vents and boiler and water heater exhausts.</p> <p>There are no emissions to surface water from the installation. There are three emissions to sewer (S1, S2 and S3), that are authorised by a trade effluent consent to discharge with Yorkshire water</p> <p>Dry cleaning is carried out to remove as much residual material as possible and all spilt material is picked up prior to wash down. Catchpots and screens are in place at drains in the processing area to filter out food debris.</p>
Fugitive emissions	
<ul style="list-style-type: none"> • <i>Regularly inspect pipe joints, shaft seals and gaskets in the refrigeration plant using proprietary leak detection equipment.</i> • <i>Ensure that a system log book is kept which records:</i> <ul style="list-style-type: none"> ○ <i>quantity of refrigerant and oil added to or removed from the system(s)</i> ○ <i>leakage testing results</i> ○ <i>location and details of specific leakage incidents.</i> 	<p>Refrigerant leak detection not in place, see improvement programme (IC2).</p> <p>The BAT assessment states that this is undertaken.</p>
Odour monitoring	
<ul style="list-style-type: none"> • <i>Ensure all effluent treatment plant is adequately sized and maintained, check that site drains do not become blocked.</i> 	<p>Good housekeeping, cleaning procedures, regular cleaning of the yard and effluent screen, combined with PPM will ensure that the effluent system remains unblocked and free from odour.</p>

Storage & containment

Chemicals are stored in lockable cages within a chemical store. The chemical store has a concrete base and is located away from surface water drains. The store is locked with restricted access and only small volumes of cleaning chemicals are stored at any one time. Any spillages are controlled by use of spillage mats and absorbent socks, which are contained within the chemical store spill kit.

Waste oils are stored in secure containers and transferred into larger drums for disposal using secondary containment spill decks. Spill decks are also located away from any potential water pathways.

The site has an effluent pumping system and bund which would act as buffer storage should there be a build-up of effluent water.

We expect that adequate storage and containment measures are in place for the chemicals stored at the installation.

Emissions to Air

The installation has two small hot water heaters (2 x 388 kilowatts) and two steam boilers (2 x 1,300 kilowatts). The total capacity of the heaters and boilers on site is 3,376 kWh.

Due to the size of the combustion plant we do not need to assess the combustion emissions to air and we therefore conclude that the emissions to air from the proposal are considered insignificant and have not been considered as part of the H1 risk assessment..

Emission to sewer

Approximately 32,000m³/year of effluent is produced at the installation mostly from the wash down and cleaning of processing areas and machinery. This results in light meat contamination at the discharge points (East discharge and West discharge shown on the site plan). All process effluent passes through an interceptor screen prior to discharge to sewer and subsequent treatment at the sewage treatment works. There is no discharge to surface water or ground water from the installation.

The discharge to sewer takes place in accordance with the terms of a trade effluent discharge consent with Yorkshire Water. The consent includes specific parameters relating to effluent arising from the factory. It limits effluent emissions for the following: Temperature, pH, Suspended Solids, Chemical Oxygen Demand (COD), Sulphides, Phosphorous, and Oil.

Odour

Our guidance document 'How to Comply with your Environmental Permit' states that odour is likely to be a key issue for the food and drink sector. There is human occupation less than 10m from the boundary as the site is located within an industrial estate. The nearest residential receptor is located approximately 500m north of the site.

The risk assessment, submitted with the application identifies a number of potential sources of odour from the site, including; skips, drains, effluent and fugitive emissions from vents associated with cooking, roasting and smoking,

The operator has not submitted an odour management plan (OMP) with this application. However the operator has committed to good housekeeping, cleaning procedures, regular cleaning of the yard and effluent screen, combined with regular preventative planned maintenance to ensure that the effluent system remains unblocked and free from odour.

As part of the sites management plan, regular environmental audits and inspections are undertaken to identify any sources of odour. An environmental complaint procedure is in place and available to the public. The site has been operated by Cranswick Convenience Foods Limited, at a lower throughput capacity, since 2011. To date there have been no complaints received at the at the site relating to odour.

The standard odour condition has been included within the permit meaning that; if in future odour does become an issue and complaints are received then the operator will be required to submit an OMP for the site to the Environment Agency.

Improvement programme

The operator has identified the parts of the process that will require improvement in order to be considered Best Available Technique (BAT).

We have included two improvement conditions (ICs) in the permit to address this, details of which are as follows:

IC1: There is currently no effluent monitoring installed at site, the improvement condition is in place to ensure that a full assessment of available options for monitoring effluent quantity and quality sub metering measures is undertaken within 3 months of permit issue.

A report will be submitted to the Environment Agency and a timescale for implementation of any improvements shall be agreed with the compliance officer.

IC2: This IC ensures that the Operator identifies all refrigeration systems on site including the refrigerant type and inventory in each system and leak detection equipment present on each system.

It also ensures that for refrigeration systems, on which leak detection equipment is not already present, the operator shall identify measures for installation of leak detection equipment and a timescale for implementation. This must be undertaken within 3 months of the permit being issued.

Annex 1: decision checklist

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

Aspect considered	Justification / Detail	Criteria met Yes
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.	✓
Responses to consultation and web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
Operator		
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓
Site condition report	The operator has provided a description of the condition of the site. We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED–guidance and templates (H5).	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>We consider the land unlikely to have historic contamination based on its previous use.</p> <p>See key issues for further information.</p>	
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <ul style="list-style-type: none"> • Humber Estuary designated as a Special Area Conservation (SAC), Special Protection Area (SPA) and Ramsar is located within 4 kilometres of the installation. • 41 local wildlife sites and one local nature reserve are located within 2 kilometres of the installation. <p>Due to the combined thermal input of all the boilers on site being less than 5MWth, this installation is not considered '<i>relevant</i>' for assessment under the Environment Agency's procedures which cover the Conservation (Natural Habitats & con.) Regulations 1994 (Habitats Regulations). This was determined by referring to the Agency's guidance 'AQTAG014: Guidance on identifying '<i>relevance</i>' for assessment under the Habitats Regulations for installations with combustion processes.'</p> <p>A full assessment of the application and its potential to affect the site has been carried out as part of the permitting process. We consider that the application will not affect the site.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance. An Appendix 11 form was completed, concluding no likely significant impact, and submitted to Natural England for information only.</p>	✓
Environmental Risk Assessment and operating techniques		
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 satisfactory.</p>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>The operator undertook a screening of the impact of emissions using the H1 tool. However, this has not been assessed as the point source emissions to air from the boilers and ovens are considered unlikely to have a negative impact on air quality.</p> <p>All emissions including, amenity such as odour and noise, may be categorised as environmentally insignificant. There is no history of noise or odour complaints at the site.</p>	
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>How to comply with your environmental permit:</p> <ul style="list-style-type: none"> - Technical Guidance note EPR 6.10 Additional guidance for the food and drink sector <p>The key measures proposed by the Operator are discussed in the Best Available Techniques (BAT) Assessment above.</p> <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the Food and Drink Sector Guidance Note EPR 6.10 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant Best Available Techniques Reference Documents (BREFs).</p>	✓
The permit conditions		
Improvement conditions	<p>Based on the information on the application, we consider that we need to impose improvement conditions.</p> <p>We have imposed improvement conditions to ensure that:</p> <ul style="list-style-type: none"> ➤ the appropriate measures are in place to monitor site derived effluent. ➤ appropriate measures are in place to ensure that accidents that may cause pollution are minimised and any leaks can be detected. <p>See key issues for further information.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Incorporating the application	<p>We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.</p> <p>These descriptions are specified in the Operating Techniques table in the permit.</p>	✓
Reporting	<p>We have specified reporting in the permit.</p> <p>We have included a requirement for the annual reporting of energy and water usage on the site, to ensure that it is operated efficiently.</p> <p>We made these decisions in accordance with our guidance document 'How to comply with your environmental permit'.</p>	✓
Operator Competence		
Environment management system	<p>There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.</p>	✓
Relevant convictions	<p>The National Enforcement Database has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found.</p> <p>The operator satisfies the criteria in RGN 5 on Operator Competence.</p>	✓
Financial provision	<p>There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.</p>	✓

Annex 2: Consultation and web publicising responses

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

Response received from
Health & Safety Executive – Letter dated 31/03/2015
Brief summary of issues raised
No comments.
Summary of actions taken or show how this has been covered
No further action required.

Response received from
Environmental Health Hull city council - Email dated 02/04/2015
Brief summary of issues raised
Confirmation that no complaints relating to noise have been received regarding this premises and no enforcement action has been taken.
Summary of actions taken or show how this has been covered
No further action required.

Response received from
Public Health England (PHE) - Letter dated 20/04/2015
Brief summary of issues raised
Based on the information contained in the application Public Health England has no significant concerns regarding the risk to the health of the local population from the installation, provided that the BAT improvements identified within the application in relation to aqueous emissions monitoring and refrigerant storage are implemented. This consultation response is based on the assumption that the permit holder shall take all appropriate measures to prevent or control pollution, in accordance with the relevant sector guidance and industry best practice.
Summary of actions taken or show how this has been covered
Improvement conditions IC1 and IC2 are in place to address the above mentioned BAT improvements.

The following agency was consulted but no response has been received:

- Food Standards Agency (FSA)

The application was also advertised on the Environment Agency's website from 10/04/2015 to 08/05/2015, no comments were received in response to the publication.