

Permitting decisions

Part surrender including variation and consolidation

We have decided to accept the surrender of part of the permit and grant the variation for Bioganix (Bonby) Food Waste Handling Facility operated by Bioganix Limited.

The permit numbers are EPR/FP3092NC/S009 and EPR/FP3092NC/V010.

We are satisfied that the necessary measures have been taken to avoid any pollution risk and to return the site to a satisfactory state. We consider in reaching that decision we have taken into account all relevant considerations and legal requirements.

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.

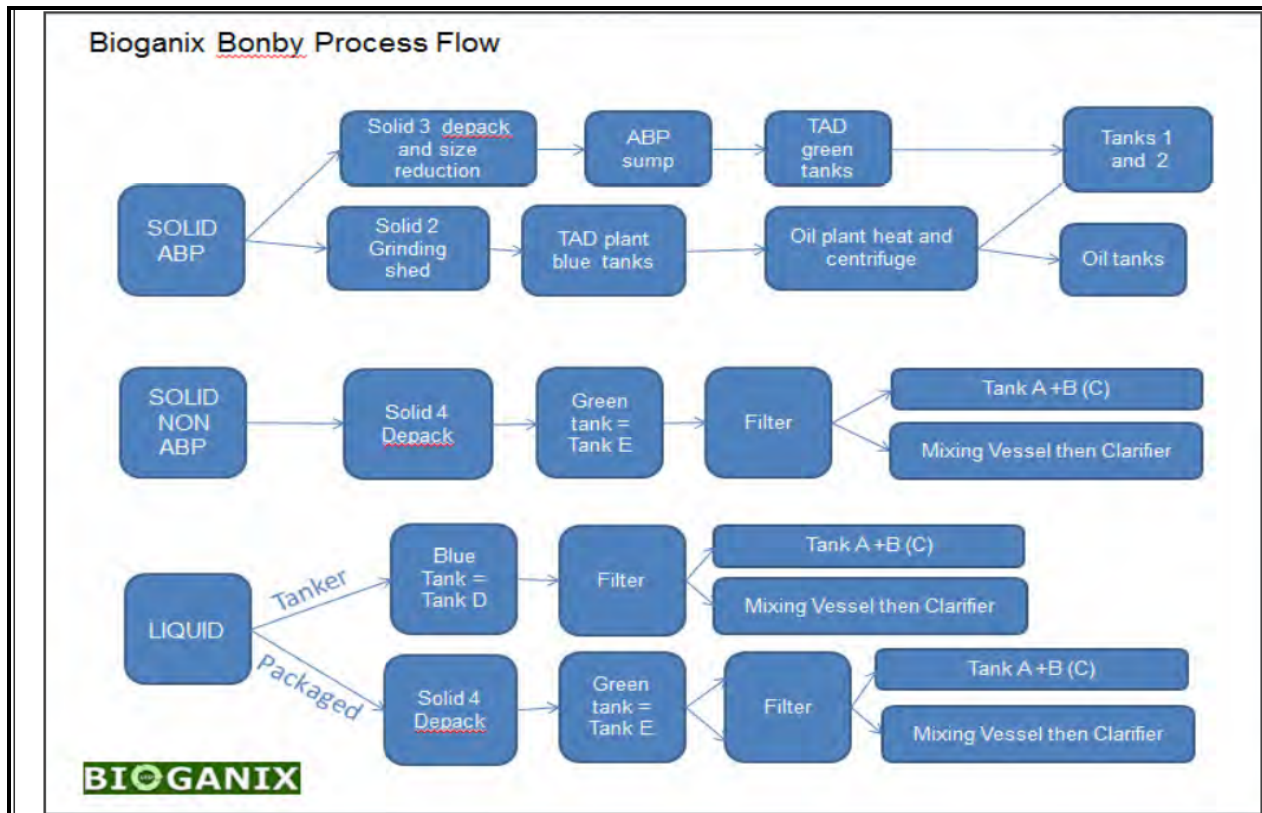
Unless the decision document specifies otherwise, we have accepted the applicant's proposals.

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

Key issues of the decision

1. Site activities

The operator provided a description of the proposed activities which is specified in the diagram below:



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

The partial surrender and variation application includes:

- the removal of the biological treatment of wastes via aerobic digestion as a waste operation;
- addition of a scheduled activity for the recycling of animal wastes above ten tonnes per day – Section 6.8 A(1)(c);
- addition of a waste operation for the physical (mechanical) treatment of non-animal by-product wastes;

As a result of these changes, the facility will become a bespoke Installation and a waste operation and will be regulated as follows:

Scheduled or listed activity (AR1, Table S1.1 in the permit)

- The recovery of oil and residues from chicken parts and physical treatment of animal by-products (ABP) wastes to derive a liquid feedstock suitable for anaerobic digestion – Section 6.8 A(1)(c)

Directly associated activities (AR2 to AR9, Table S1.1 in the permit)

- Storage of wastes pending recovery (This includes wastes stored prior to physical treatment on site and wastes stored post-treatment and prior to despatch off-site)

- Physical treatment for the purpose of recycling;
- Steam production (for the oil recovery process);
- Raw material storage (including fuels);
- Recovered oil storage;
- Collection and storage of surface water;
- Temporary storage prior to transfer; and
- Air treatment

Bespoke waste operation (AR10, Table S1.1 in the permit)

- The physical treatment, blending and mixing of non-ABP wastes to derive a liquid feedstock suitable for anaerobic digestion and landspreading.

2. Designation of chicken parts

In their application, the operator stated that chicken parts (chicken skins and wing tips) form a large part of the process for oil extraction and are imported as a raw material and not as a waste.

We requested additional information from the operator to provide justification as to why the chicken parts are deemed to be a raw material (non-waste product). This request was included in an information notice served on 6 July 2018.

In their response to the notice, the operator reported that the chicken parts are currently supplied to the facility by two companies. One of the two companies have determined that their processes can create a number of products and by-products and there is a demand which accounts for their entire supply, i.e. there is no excess which is considered to be waste. The operator also states that:

- The chicken parts are produced with a specific end use in mind, having established a market value for them as a rendering raw material for protein production and increasingly as a supply to food handling facilities for oil recovery.
- The chicken parts have never been determined as a waste and as such no end of waste assessment is required. The material is delivered to the site as a by-product and not a waste.
- The chicken parts are accepted as a high-quality feedstock to enhance an oil recovery process and meets all the criteria of Article 5 of the Waste Framework Directive.

The operator submitted additional information during the determination to support the designation of chicken parts as a raw material as follows:

- The chicken parts are produced as an unavoidable residue of the human chicken food processing and manufacturing industry. Human food grade chicken skins and wings are removed from the carcass during processing of human food chain products. The carcass is divided into a range of different parts that are diverted to different end uses (e.g. chicken breast fillets, chicken ready meal ingredients etc.).
- All of the chicken parts including those received at the facility are food grade and are handled as such according to Hazard Analysis Critical Control Point (HACCP) principles during the production process.
- No additives are used during the butchering /preparation process, and the parts are removed in such a way as to ensure the continuing fitness for human consumption of all of the chicken meat products arising.
- The chicken parts are stored in clean Dolavs (storage containers) at the site of production before being transported to another site for continued use.

The operator accepts that the chicken parts will become waste only at the point that it is mixed with other wastes once received on site. The operator will therefore not need to include this material in waste returns as wastes received on site, but will need to take consideration of this material when complying with the maximum tonnages of wastes that can be processed on site in a year, since this material will become a waste once mixed with other wastes.

Our assessment

We considered the operator's designation of the chicken parts as a raw material (non-waste) during our determination.

The by-product test in Article 5 of the Waste Framework Directive 2008 codified the existing case law on the definition of waste.

Article 5(1) is reproduced below:

1. A substance or object, resulting from a production process, the primary aim of which is not the production of that item, may be regarded as not being waste referred to in point (1) of Article 3 but as being a by-product only if the following conditions are met:

- (a) further use of the substance or object is certain;
- (b) the substance or object can be used directly without any further processing other than normal industrial practice;
- (c) the substance or object is produced as an integral part of a production process; and
- (d) further use is lawful, i.e. the substance or object fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.

Our legal view is that it would be wholly contrary to existing case law to regard the end use of the chicken parts as being the use of them for oil extraction and that as such they are a material that can be used without further processing (other than normal industrial practice). The processes carried out at the Bioganix site (as detailed on their website) cannot properly be described as a production process. They are designed to deal with residues that have been discarded rather than to use those residues as products. The European Commission's [guidance](#) on by-products makes it clear that treatments that are normally considered to be waste recovery operations are not normal industrial practice in this context. That is entirely consistent with case law on the meaning of discard, which Article 5 was not attempting to change (Arco Chemie case – page 61 of [legal definition of waste guidance](#)). That case law was in relation to the term “discard” and identifying factors that would mean a material should not be regarded as waste based on the discard test.

Although there is recognition that some of the listed recovery operations can be applied to non-waste material, in this case it is clear that the chicken parts are destined for a waste recovery operation. The extraction processing equipment is designed to deal with waste materials and the oil is then mixed with other waste and is treated as a waste material destined for use in biodiesel manufacture.

There appears to be no issue regarding the waste status of the chicken skins and bones, as the operator describes this as waste. Consequently, it is our view that the chicken parts are waste with respect to this Installation. This means that the operator is required to include the chicken parts in the annual throughput of waste allowed at this Installation which is set at 75,000 tonnes.

3. Partial surrender of area of land

The partial surrender is a low risk surrender incorporating old unused buildings. The operator has not used this area of land for any waste treatment activities since the issue of the original permit. There are no direct discharges onto this area of land. There have been no reported pollution incidents within this area of land.

We are satisfied that there is no risk of pollution with respect to the surrendered land.

4. Waste types

The operator provided a list of proposed wastes for treatment at the facility. We requested a detailed characterisation of some non-standard wastes (see below) in accordance with the Environment Agency Framework Guidance Note (July 2013). The operator provided additional information but this was not supported with individual waste analysis for each of the proposed wastes (including laboratory analysis), in accordance with the Framework Guidance Note. The operator stated that similar wastes had been accepted at different sites in their submission. We do not consider that this is sufficient justification to accept these wastes at this facility.

The operator requested that the Environment Agency should add a pre-operational condition which requires the full characterisation of the non-standard wastes following permit issue. We are not able to insert a pre-operational condition in the permit which requires the operator to provide additional information on the characterisation of non-standard waste codes (post-permit issue) as we need to determine that BAT is being applied at the Installation during the permit determination stage. If the operator intends to accept these non-standard waste codes at the facility, they should collate the required information and submit a permit variation in future. We have followed the same approach for other applicants in England.

Consequently, we have excluded the following non-standard waste streams:

02 04 01	soil from cleaning and washing beet
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11
08 03 08	aqueous liquid waste containing ink
19 08 05	sludges from treatment of urban waste water
19 09 01	solid waste from primary filtration and screenings

We have accepted the following non-standard waste streams as we consider them to be suitable for the proposed treatment at the facility:

02 06 02	wastes from preserving agents – vinegar only
16 03 06	organic wastes other than those mentioned in 16 03 05 – out of specification beverages including carbonated or soft drinks, tea, coffee, alcoholic beverages below the hazardous threshold.

5. Bioaerosols

We have set monitoring requirements for bioaerosols in ambient air as the biofilter is located less than 250 metres from a sensitive receptor (Brigg Lane Biogas AD Plant). The operator is required to undertake monitoring as specified in the Environment Agency's guidance, M9: Environmental monitoring of bioaerosols at regulated facilities (version 2, July 2018). The monitoring requirement has been included in the permit (see Table S3.3).

In addition, we have set a pre-operational condition (POM 1) in the permit which requires the operator to carry out background sampling of bioaerosols upwind of the plant and submit a written report of the monitoring to the Environment Agency for approval. This is for the purpose of assessing whether or not the operator is compliant with the emission limits for bioaerosols in ambient air. The pre-operational condition applies to the replacement biofilter which the operator has committed to install on site.

We are satisfied that the operator has satisfactory systems in place to monitor and minimise any emissions of bioaerosols.

6. Improvement conditions

The operator proposes to develop a new feather hydrolysis and protein production shed on site. A pre-application request has been submitted in this respect and a planning application has been made. The construction will be a new turnkey facility. The proposal includes a £1.5 million thermal oxidiser and a biofilter designed to serve both the new site and the existing Bioganix site. The biofilter will be constructed to a similar design to the sister site and will require planning permission before construction.

The operator has committed to the construction of the new biofilter within 18 months. This will go ahead whether or not planning is granted for the new operations (a separate planning submission might be required for just the biofilter in this instance). The operator proposes to provide design details to the Environment Agency at least 3 months prior to construction, once the total size of buildings it is required to serve is confirmed.

We have considered the operator's proposal as part of the application. We are satisfied that the operator has satisfactory systems in place to monitor and minimise any emissions of odour at the facility. There have been no odour complaints as a result of activities on site within the last two years. Consequently, we have accepted the operator's proposal to commission and install a replacement biofilter within 18 months.

The proposed replacement biofilter will undergo a period of commissioning before becoming fully operational. At the commissioning stage, operators are required to demonstrate that the plant (including any odour abatement system) is working effectively and that appropriate measures are in place to protect the environment and human health during this period.

We have included Improvement condition 1 in the permit which requires the operator to submit a commissioning plan to us for approval. The commissioning plan shall be written to ensure that the permit conditions will be met under all anticipated operating conditions and the site odour emissions do not extend beyond the site. The operator shall also confirm the commissioning programme, details of the biofilter design specifications and monitoring protocols.

Improvement condition 2 requires the operator to install the replacement biofilter in accordance with the agreed commissioning plan.

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"> • Director of Public Health (North Lincolnshire Council) • North Lincolnshire Council (Environmental Health Department) • North Lincolnshire Council (Planning Authority) • Public Health England • Health & Safety Executive • National Grid • Anglian Water (Drinking Water & Sewerage Undertaker) • Animal & Plant Health Agency <p>The comments and our responses are summarised in the consultation section.</p>
Operator	
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.
The facility	
The regulated facility	<p>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' and Appendix 1 of RGN 2 'Interpretation of Schedule 1' and guidance on waste recovery plans and permits.</p> <p>The permitted regulated facilities have changed as a result of the partial surrender and the variation. 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 (see key issues section).</p>
The site	
Extent of the site of the	The operator has provided a plan which we consider is satisfactory, showing

Aspect considered	Decision
facility	the extent of the site of the facility. The plan is included in the permit.
Pollution risk	We are satisfied that the necessary measures have been taken to avoid a pollution risk resulting from the operation of the regulated facility.
Satisfactory state	We are satisfied that the necessary measures have been taken to return the site of the regulated facility to a satisfactory state. In coming to this decision we have had regard to the state of the site before the facility was put into operation.
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 and baseline reporting under the Industrial Emissions Directive.
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> <p>We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.</p>
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 applicant must use are specified in table S1.2 in the environmental permit.
Operating techniques for emissions that screen out as insignificant	Emissions of nitrogen oxides, sulphur dioxide and particulate matter have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation. We consider that the emission limits included in the installation permit reflect the BAT for the sector.
Odour management	We have reviewed the odour management plan in accordance with our guidance on odour management. We consider that the odour management plan is satisfactory.

Aspect considered	Decision
Fire prevention plan	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.
Permit conditions	
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.
Raw materials	We have specified limits and controls on the use of fuels as required by the Sulphur Content of Liquid Fuels (England and Wales) (Amendment) Regulations 2014.
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 • the proposed infrastructure is appropriate • the environmental risk assessment is acceptable. <p>We have excluded some wastes (see key issues section).</p> <p>We made these decisions with respect to waste types in accordance with the Environment Agency Framework Guidance Note (July 2013): Framework for assessing suitability of wastes going to anaerobic digestion, composting and biological treatment.</p>
Pre-operational conditions	Based on the information in the application, we consider that we need to impose pre-operational conditions (see key issues section).
Improvement programme	Based on the information on the application, we consider that we need to impose an improvement programme. We have imposed an improvement programme (see key issues section).
Emission limits	No emission limits have been added to the boiler as a result of this variation. Emissions of nitrogen oxides, sulphur dioxide and particulate matter have been screened out as insignificant. The emission limits specified in the Medium Combustion Plant Directive (MCPD) will apply at this Installation from 1 January 2030.
Monitoring	<p>We have decided that monitoring should be carried out for Total bacteria and <i>Aspergillus fumigatus</i> as listed in the permit, using the methods detailed and to the frequencies specified.</p> <p>These monitoring requirements have been imposed in order to ensure bioaerosols released do not impact on sensitive local receptors.</p> <p>We made these decisions in accordance with technical guidance note M9: Environmental monitoring of bioaerosols at regulated facilities (version 2, July 2018).</p> <p>Based on the information in the application we are fully satisfied that the operator's techniques, personnel and equipment have either MCERTS</p>

Aspect considered	Decision
	certification or MCERTS accreditation as appropriate.
Reporting	We have specified reporting in the permit. Reporting is required for annual production of feedstock, bioaerosols monitoring, raw materials, water and energy usage. This will enable the Environment Agency to assess whether there are any changes in the efficiency of the waste treatment process and to ensure that BAT is applied at the Installation. We made these decisions in accordance with Sector Guidance Note IPPC S5.06 – Guidance for the recovery and disposal of hazardous and non-hazardous waste.
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. 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 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	<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</p>

Aspect considered	Decision
	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.

Responses from organisations listed in the consultation section

Response received from Public Health England
Brief summary of issues raised
<ol style="list-style-type: none">1. Within the Quantitative Risk Assessment appendices, it is noted that surface water drains into a sump within the east of the site, which is then emptied and disposed of off-site as and when required, however it was also noted that this is currently prone to overflowing during periods of heavy rainfall. We ask that the regulator is satisfied that there is no significant risk or ensures appropriate controls or improvements are put in place.2. Within the fire prevention plan, the operator notes that there are sandbags and forklifts available to form a temporary bund for firewater in case of a fire in the storage area for the bales of packaging waste. We ask that the regulator consider whether staffing would always be available to ensure the safe and prompt construction of a temporary bund. This should be considered in conjunction with the observation that there can be surface water runoff from the site.3. The operations on site will generate odorous emissions and controls and abatement such as the biofilter should reduce these to acceptable levels. It is noted that the operator states that the biofilter will be deemed to be working appropriately if temperature is within 15 – 40 degrees and moisture content within 30 – 60%, and that filter media is replaced periodically to maintain efficiency. We ask that the regulator ensures that the operator can reliably achieve continuity of abatement performance.4. Based on the information contained in the application supplied to us, subject to the above noted concerns being addressed, Public Health England has no significant concerns regarding the risk to the health of the local population from the installation. 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
<ol style="list-style-type: none">1. The facility does not have any point source emissions to surface water. The site is fully contained with concrete surfacing. Drainage from the animal by-products (ABP) reception and processing area is directed to a sump north of the site. This drainage is extracted for re-use within the ABP process. Other site drainage is directed to a septic tank on the east of Tanks A, B and C. This is emptied periodically by tanker as prevailing weather conditions dictate. Domestic sewage is collected by a septic tank isolated from the main site drainage. The operator has measures in place to monitor the storage of liquids in the sumps on site.2. We visited the site on 10 September 2018 to ascertain the activities proposed on site. We highlighted the inadequacy of the site secondary containment on site and requested that improvements be made to the existing containment. The operator has confirmed that the improvements have been made to ensure that there are no breaks in the existing secondary containment which includes the storage area for the packaging.3. The monitoring parameters of the existing biofilter as stated by the operator are in accordance with those in the Waste Treatment BAT Reference Notes and are considered appropriate. The operator commits to the replacement of the existing biofilter (see key issues section).4. No further action. The facility will be operated in accordance with BAT to prevent or control pollution as specified in our technical guidance notes: IPPC S5.06 – Guidance for the recovery and disposal of hazardous and non-hazardous waste and H4 – Odour management.

No representations received from:

- Director of Public Health (North Lincolnshire Council)
- North Lincolnshire Council (Environmental Health Department)
- North Lincolnshire Council (Planning Authority)
- Health & Safety Executive
- National Grid
- Anglian Water (Drinking Water & Sewerage Undertaker)
- Animal & Plant Health Agency