

Permitting decisions

Variation

We have decided to grant the variation for Kitsmead Recycling Centre operated by Envar Composting (Surrey) Limited.

The variation number is [EPR/GB3802KZ/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
- explains why we have also made an Environment Agency initiated variation
- 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

In reaching our decision to approve this variation application, we have considered the following key issues:

- Bioaerosols monitoring
- Fire Prevention Plan (FPP)
- Odour Management Plan (OMP)
- Improvement programme requirements

Bioaerosols monitoring

The operator provided a bioaerosols risk assessment in support of this application. We carried out an assessment of the site location and the distance of site processes from sensitive receptors as part of this determination.

There are external site operational processes within 250 metres of a sensitive receptor, which is an AD plant. There are no channelled or point source release within 250 metres that are open sources e.g. biofilters within 250 metres of human receptors.

We consider it appropriate to insert the bioaerosols monitoring requirements in the permit in accordance with our guidance TGN M9 Environmental monitoring of bioaerosols at regulated facilities (version 2, July 2018). The operator is required to comply with the new monitoring requirements from the date of permit issue.

We have updated the bioaerosols monitoring requirements in the permit in accordance with our guidance TGN M9 Environmental monitoring of bioaerosols at regulated facilities (version 2, July 2018). We have removed the requirement to monitor gram negative bacteria. The parameters to be monitored are *Aspergillus fumigatus* and Total mesophilic bacteria. The operator is required to comply with these monitoring requirements from the date of permit issue.

Fire Prevention Plan (FPP)

The measures set out in the Fire prevention plan: environmental permits guidance (November 2016) (the guidance on gov.uk) have 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.

We consider, that if an operator submits a fire prevention plan (FPP) that includes the measures set out in the guidance, we are likely to approve the FPP. We identified the potential risk of fire from the Installation due to the treatment and storage of combustible non-hazardous wastes on site (green waste).

The applicant submitted a FPP in support of this application. The FPP has identified common causes of fire in line with our guidance and has provided appropriate measures to reduce the associated risks. The FPP contains information about the combustible wastes on site – how they are stored, maximum quantities at any given time and the maximum storage times. The FPP has also considered and provided mitigation measures for non-waste materials which could pose a fire risk.

The 'first in first out' principle will be utilized on site for proper stock rotation and the operator has demonstrated how this principle will work at the facility to ensure that wastes are not stored for longer than they should. There is a quarantine area on site with the capacity to hold at least 50% of the volume of the largest waste pile. The FPP contains information on how this quarantine area will be used in the event of a fire to prevent spreading. Separation distances and pile sizes, where applicable, are compliant with the requirements of our guidance.

The FPP has not considered the actively managed phases of sanitisation and stabilisation of waste, which are exempt from the requirements of the FPP guidance. The oversized materials from the open windrow composting process comply with the requirements of our guidance and will be constantly incorporated into the open windrow composting process.

Wastes stored within the reception areas of the facility have not been considered because of the quick processing time of 48 hours up to an absolute maximum of 5 days which the operator has committed to, so the possibility of self-combustion is very low. Storage of materials after screening for the open windrow process has also not been considered in the FPP because at this stage, the compost is considered a PAS 100 compliant material which is no longer designated as waste.

The measures put in place by the operator for fire detection and suppression are proportionate to the nature and scale of activities on site. For detecting fires, we have considered that regular monitoring during the active phases (sanitisation and stabilisation) of the process using the compost manager equipment, as proposed is sufficient as any temperature increase will most likely be detected. The trigger temperature of 70 °C is acceptable for the process considering that the thermal runaway of compost begins at 80 °C.

Table 1 – trigger temperatures for waste piles in the different waste treatment processes.

Building/ waste type	Open windrow composting process	Thermal runaway of compost
Trigger Temperature Degrees °C	70	80

Upon reaching this trigger temperature, the operator will spread the affected windrow to allow for cooling.

For suppression of fires, we have considered that wastes are not stored in buildings, the operational activities are in the open, so the windrows are easily accessible from all sides. In addition, there are fire firefighting pieces of equipment including a water pump and the site has sufficient water supply for fire suppression.

We have assessed the operator's FPP and we are satisfied that the measures in place are appropriate for:

- management of non-waste materials
- managing common causes of fire such as arson, hot works, smoking materials and arson
- preventing self-combustion, managing waste piles and preventing the spread of fire.

A plan is in place to clear and decontaminate the site during and after an incident and the operator has demonstrated that there are enough resources for active firefighting on site.

We consider that the proposed fire prevention measures are in line with the requirements of our FPP guidance and they are considered to be appropriate measures. As part of compliance, the Environment Agency can audit the FPP at any time and should any deficiencies be identified, the operator will be advised and the FPP will need to be updated accordingly.

Odour Management Plan (OMP)

Composting of organic waste has the potential to generate malodours. In support of this application, the operator has submitted an OMP which contains information on measures that will be put in place at the facility during the composting process to prevent and /or minimise odour emissions.

The OMP contains a feedstock inventory carried out by the operator to understand the odour potential of the green waste that enters the composting process from different sources. This feedstock inventory provides

an assessment of green waste by the source of material, identifying the typical and abnormal compositions of waste from the different sources and providing an overall odour potential based upon the likelihood of abnormal compositions being encountered on site. An analysis of how waste from the various sources could be affected by seasonal variation was carried out by the operator and the odour implication of this variation has been detailed within the OMP along with management controls in place for any potential odorous emissions.

The OMP includes an odour inventory which is a review of the different stages of the composting process from waste acceptance to compost storage. The review identifies site locations where potentially odorous materials are stored, upper limits for storage amounts and the potential odour impact of those materials to inform management procedures, which will be employed at the facility. At each stage of the process, there are monitoring parameters, critical limits and process controls that contribute to the mitigation of odour emissions.

Waste delivered to the facility will be inspected by site staff for contamination and any small contamination is removed by hand (i.e. large objects, plastics etc.). Anything other than minimal contamination will be rejected as not meeting site waste acceptance criteria. Feedstock material will be processed every day, thereby ensuring there is no excessive storage of waste. In the quiet time of the season, or for example over Christmas Holidays, the storage time may be up to 5 days. In the busier times, such as the peak of the season (warm weather), the processing shall be daily, and will be undertaken within 48 hours. If the material is of greater volatility (such as aged grass clippings), processing will be within 4 hours. The reception area will be cleared of waste at least within 5 days, ensuring that no material is left unprocessed at the back of the storage area. The First in and First out principle will be employed to ensure that as older waste is being processed, fresh waste can be delivered. In line with the requirements of the PAS 100 guideline, there will be a record-keeping system that maintains traceability of the processing locations and processing times at each stage of the whole process including product storage after screening.

Monitoring of the active stages of sanitization and stabilization will be carried out regularly (daily and weekly for some parameters) using compost manager equipment to ensure that optimum critical limits of relevant parameters (temperature, moisture, oxygen) are not exceeded. The OMP also details contingency measures which will be put in place to restore the process to normal operations when process controls prove inadequate.

The operator will carry out daily olfactory monitoring at six points around the perimeter of the site. The site's odour level is based on an intensity scale of 1 to 6, with 6 being "extremely strong odour", 3 being "distinct odour", which is easily detectable while walking and 1 then being "very faint odour". Extensive monitoring by the operator beyond the installation boundary will be triggered when the odour level is above the intensity rating of 3. Procedures for any corrective and preventive actions for such occurrences are detailed in the OMP.

The operator uses information from a weather station on site to consider the adequacy of undertaking certain odorous activities. This is undertaken to ensure that sensitive receptors are not affected by site operations. Sensitive receptors within 1000 metres of the facility are detailed in the OMP. There is an anaerobic digestion facility and a residential property within 50 metres and 300 metres from the site respectively.

The OMP has also considered incidents and emergencies that might adversely affect odour control at the facility. The operator has provided information on timelines for actions in response to these potential incidents and emergencies. The operator has also committed to the suspension of receipt of potentially odorous substances and/ or removal of such substances from the site.

We have approved this OMP (V5 May 2020). In approving the Odour Management Plan, we consider that the control measures contained in the OMP are suitable for the nature and complexity of the facility.

We have considered that the process controls are sufficient to minimise the potential for odour emissions from this facility. The submitted OMP is also in line with our H4 Odour Management Guidance.

Improvement programme requirements (IC1 and IC2)

We have added an improvement condition (IC1) which requires the operator to submit a “Storage Lagoon Plan, 12 months after the issue of the variation. The plan shall contain the results of a review conducted, by a competent person, in accordance with the methodology detailed in the CIRIA C736 (2014), of the condition and extent of the site lagoon where compost leachate is being stored, treated, and/or handled.

We have also added IC2 which requires the operator to provide a written “compost liquor storage plan” 12 months after the issue of the variation. The plan shall contain the results of a review of the current storage of compost liquor produced from site operations. The review shall examine site contingency arrangements in the event of closed landspreading periods, extreme weather conditions, site closure, disease outbreak etc.

The storage plan shall include:

- Existing cover arrangements on storage lagoons used to store compost liquor to minimise odour and ammonia emissions;
- Additional storage capacity on-site (at least 2 months storage) and storage capacity off-site;
- Identification of alternative outlets for compost liquor – identify companies /permitted waste facilities that would be able to manage the compost liquor, taking into account their permits and capacity constraints.

These improvement programme requirements have been included in the permit to ensure that the compost leachate storage lagoon is in line with industry standards and considered to be BAT. Where there are shortfalls, the operator is required to submit an improvement plan to address the deficiencies.

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/Engagement	
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. We consulted the following organisations:</p> <ul style="list-style-type: none"> • Food Standards Agency • Health and Safety Executive • Director of Public Health - Surrey • Public Health England • Fire and Rescue Service Kent • Runnymede Borough Council - Environmental Health <p>The comments and our responses are summarised in the consultation section.</p>
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', Appendix 1 of RGN 2 'Interpretation of Schedule 1'.</p> <p>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.</p>
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.
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>

Aspect considered	Decision
	We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.
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 satisfactory. Sector specific issues regarding fire prevention and odour and bioaerosols are addressed in the key issues section.</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>
Odour management	<p>We have reviewed the odour management plan in accordance with our guidance on odour management. We consider that the odour management plan is satisfactory.</p> <p>See key issues section.</p>
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.</p> <p>See key issues.</p>
Permit conditions	
Updating permit conditions during consolidation	We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit(s).
Changes to the permit conditions due to an Environment Agency initiated variation	<p>We have varied the permit to remove references to previous legislation and provided a consolidated permit using our modern permit template. The consolidated variation notice contains many conditions taken from our standard Environmental Permit template.</p> <p>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 consolidated variation notice, we have considered the techniques identified by the operator for the operation of their installation, and have accepted that the details are sufficient and satisfactory to make those standard conditions appropriate.</p>

Aspect considered	Decision
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 not specified limits and controls on the use of raw materials and fuels.
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; and • the environmental risk assessment is acceptable. <p>We made these decisions with respect to waste types in accordance with our Framework Guidance Note – <i>Framework for assessing suitability of wastes going to anaerobic digestion, composting and biological treatment</i> (July 2013).</p>
Improvement programme	<p>Based on the information on the application, we consider that we need to impose an improvement programme.</p> <p>See key issues.</p>
Emission limits	<p>ELVs based on BAT have been set for the following:</p> <p><u>Bioaerosols</u></p> <p>Total bacteria – 1000 CFU m⁻³</p> <p>Aspergillus Fumigatus – 500 CFU m⁻³</p> <p>We made these decisions in accordance with our guidance TGN M9 Environmental monitoring of bioaerosols at regulated facilities (version 2, July 2018).</p> <p>See key issues</p>
Monitoring	<p>We have added table S3.3 in the Notice for Bioaerosols Monitoring Requirements – Ambient Monitoring, in line with our guidance TGN M9 Environmental monitoring of bioaerosols at regulated facilities (version 2, July 2018).</p> <p>We have added process monitoring requirements (Table S3.2 – Process Monitoring), in accordance with our sector guidance and the Waste Treatment Best Available Techniques Conclusions (BATc) 2018.</p> <p>Based on the information in the application we are satisfied that the operator’s techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.</p>
Reporting	<p>We have added reporting for Bioaerosols:</p> <p>Total bacteria – 1000 CFU m⁻³</p>

Aspect considered	Decision
	<p>Aspergillus Fumigatus – 500 CFU m⁻³</p> <p>We have also added reporting requirements of monitored process parameters. The reporting requirement is reflected in table S4.1 – Reporting of monitoring data, of the Notice.</p> <p>We made these decisions in accordance with our guidance TGN M9 Environmental monitoring of bioaerosols at regulated facilities (version 2, July 2018).</p> <p>See key issues for further information on Bioaerosols monitoring.</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	<p>Technical competence is required for activities permitted.</p> <p>We are satisfied that the operator is technically competent.</p>
Relevant convictions	<p>The Case Management System 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	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 the standards applied to the operator are consistent across</p>

Aspect considered	Decision
	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 - Nottingham
Brief summary of issues raised
Public Health England (PHE) Nottingham – has raised no significant concerns
Summary of actions taken or show how this has been covered
N/A

No responses were received from the other organisations consulted.

This proposal was publicised on the Environment Agency's website between 30/10/2019 and 27/11/19. No representations were received during this period.