Environment Agency Permitting decisions

We have decided to grant the permit for Trafford Park IVC operated by Viridor Waste (Greater Manchester) Limited. The site is an In Vessel Composting site. Trafford Park In Vessel Composting Site operated by Viridor Waste (Greater Manchester) Limited. This site is an in vessel composting site located on Nash Road, Trafford Park in Greater Manchester which will compost both green waste and food waste. The site is designed to comply with the Animal By-products Regulations 2005. The building where the activity takes place is kept under negative pressure and fans will draw air through the air extraction system. The extracted air will be treated in an acid scrubber and carbon filter to remove dust, bio-aerosols and odorous compounds. All waste acceptance and treatment activities take place in a building. All operations will be controlled by the sites environmental management system which will be audited for inclusion under the operators ISO14001 certification.

The permit number is EPR/CP3697EJ

The operator is Viridor Waste (Greater Manchester) Limited

The facility is located at Nash Road, Trafford Park, Greater Manchester, M17 1SS

The decision was effective from 27/05/2010

Summary of the decision

We have decided to grant a permit for the operator, subject to the conditions in the permit.

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 environment protection is provided.

Purpose of this document

This decision document:

- explains how the applicant's 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.

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

Structure of this document

- Key Issues of the decision;
- Annex 1 the decision check list;
- Annex 2 the consultation responses.

Key Issues of the decision

Environmental risk

The key environmental risks posed by the site are:

Odour from waste kept and treated on site. This risk has been assessed and techniques have been designed into the site to mitigate the effects of the odour inherent in the waste that is being treated. The waste will be treated aerobically in order to reduce odour being produced by the waste. The site will be operated on a first in first out basis so waste will not be left to develop odour before it is treated. All treatment will take place inside a building operating at a negative pressure and the extracted air from the building will be emitted from emission point A1 via an acid scrubber and carbon filter which should effectively prevent odour being an issue for local human population, properties and workplaces. The Operator has done a modelling exercise for odour and that modelling exercise indicated that odour should not be an issue for the local amenity. If odour does prove to be an issue for the site then condition 3.3.2 will enable us to effectively address this issue.

Dust and bioaerosols generated from unloading, processing and composting of wastes. This risk has been assessed and techniques have been designed into the site to mitigate the effects of these activities. All operations take place inside a building operating at a negative pressure and the extracted air from the building will be emitted from emission point A1 via an acid scrubber and carbon filter which should effectively prevent dust and bioaerosols causing an environmental risk. The operator will also carry out background monitoring for bioaerosols prior to the activity starting (this is included as a pre-operational condition of the permit) and will also perform a quarterly monitoring exercise during the first year of operation in order to establish the level of bioaerosol emission. The frequency of the bioaerosol monitoring will be reviewed after the first year.

Accidents on site could pose an environmental risk. However, the operator will have an environmental management system which will be audited for inclusion under the operator’s ISO 14001 certificate. This is seen as an adequate system to manage the risks of accidents on site.

Fugitive emissions from the site should not pose a significant risk if the environmental management system is adhered to. All operations take place inside a building which is operated at a slight negative pressure. This effectively reduces the risk from fugitive emissions. All emissions from the building go through emission point A1 which has been previously discussed. The environment management system should ensure that this remains the case through correct working procedures and maintenance. The technically competent management of the site will also ensure compliance with the environmental management system.

Conservation

An easimap search has been performed and there are no issues with conservation sites.

Groundwater

There should be a minimal risk to groundwater as all operations will take place inside a building with an impermeable surface and sealed drainage system which will collect water for re-use within the composting process. This leachate will be stored in an above ground, bunded storage tank. Any excess leachate is tankered off site to an authorised waste management facility. External surface water should not be contaminated as all operations take place within a building. Also several factors relating to the management of the amenity will prevent contamination of ground external to the building including; the site will be kept clean by mechanical and manual sweeping, waste loads will be enclosed or sheeted, visual monitoring will be undertaken daily at the site boundary for dust and litter.

Air quality

Air quality should not be an issue due to this permit. There is an emission to air, but the mitigation measures in place mean that the impact of this is minimal. This has been corroborated by the H1 assessment of emissions to air as performed by the operator which concluded that the emissions were not significant. There are some air quality management zones nearby but this site is not in one.

Operational techniques

The operator has set out an operating techniques section which describes how the site will be operated and what the inherent risks are related to this. The risks related to the operation of this site have been discussed earlier in this decision document. The operating techniques set out are compatible with what is set out in the Agency's technical guidance notes; Getting The Basics Right, Technical Guidance On Composting Operations and Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste.

Monitoring and compliance

Monitoring from this site will be initially more onerous than that proposed by the Operator with quarterly monitoring of bioaerosols following on from a monitoring exercise to establish the background level of bioaerosols required by the permit as a pre-operational condition. After this initial period of monitoring for one year we may choose to review this requirement depending on the level of bioaerosols monitored. The operator has proposed a limit of 1000 colony forming units per m3 for the site. However as we are unaware of the background level for the site now, let alone at the point of commissioning, a limit for bioaerosols has not been set. Rather than set a limit immediately,

that the operator could potentially be incapable of complying with, an improvement condition has been set to monitor bioaerosols after the commissioning process is complete. Following this monitoring where any potential pollutant is identified as being released in significant quantities and / or above the benchmark values a report shall be submitted to the Agency that proposes appropriate emission limit values and further monitoring, having due regard to the fate of the substance. The report shall also contain a review of appropriate measures to assess whether further abatement or other measures are necessary in order to reduce the concentration / quantity of that emission. Where further on-going monitoring, abatement or other improvements are proposed the report shall include an implementation timetable.

Operator

There are no issues with regard to the operator being a legal entity or in control of the facility. The technical competence of the operator has been assessed as being appropriate to the activity taking place. The hours spent on site by technically competent management will be agreed by area staff during their compliance work

The facility

There are no issues regarding the composition of the facility. The operations will take place within the boundary delimited by the green line on site plan contained in Schedule 2 of the permit.

Commercial and industrial confidentiality

The operator has not made any claim with regard to commercial and industrial confidentiality

Annex 1: decision checklist

Activity	Justification / Detail	Determination criteria met	
		No	Yes
Receipt of submission			
Application fee	The application fee is correct OPRA score of 54 which gave a fee, under the charge multiplier 162, of £8748.00		✓
Commercial confidentiality	The operator has not made a claim for commercial confidentiality. We have not received any information in relation to this application that appears to be confidential in relation to any party.		✓
Consultation			
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites and our Public Participation Statement. The consultation took place on 17/07/2009 and comprised consultation with: Health and Safety executive Trafford Council Planning and Building Control Trafford Council Environmental Health Trafford Primary Care Trust		✓
Consultation responses	The consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance: Review of methods to measure Bioaerosols from composting sites		✓
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	The European Directives that apply are as follows: Waste Framework Directive.		
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 at Schedule 2, and the operator is required to carry on the permitted activities within the site boundary.		✓
Planning permission	We are satisfied that planning permission is in place and it is appropriate for the relevant waste operation applied for.		✓
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 The decision was taken in accordance with our guidance on site condition		✓

Activity	Justification / Detail	Determination criteria met	
		No	Yes
	reports – guidance and templates TGN5.		
Environmental Risk Assessment and operating techniques			
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility .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	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes – Which are Getting the basics right Best practice guidance for recovery and disposal of hazardous and non-hazardous waste (other than by incineration and landfill) Technical guidance on composting operations We accept the operators proposed techniques and proposed emission limit values are in accordance with the relevant guidance notes referenced above.		✓
The permit conditions			
Use of conditions other than those from the template	The permit contains many conditions taken from our permit template. We developed these conditions in consultation with industry having regard to the relevant legislation. This decision document does not include an explanation for these usual conditions. Where such conditions are imposed we have considered the application and accepted the details are sufficient and satisfactory to control that aspect of the operation.		✓
Waste types	We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility in tables S3.2. We are satisfied that the operator can accept these waste for the following reasons The Environment Management System is in placeand wioll provide suitable operating techniques and management for the site. The operator also has the appropriate Technical Competent Management relevant to the activities on site.		✓
Pre-operational conditions	Based on the information on the application, we consider that we need to impose the following pre-operational conditions. A condition top require the operator to perform a monitoring exercise to establish the background level of bioaerosols and gram negative bacteria at the site prior to commissioning. This condition is there to provide context for any emissions from the site post commissioning.		✓
Incorporating the	We have specified that the applicant must operate his installation in accordance with the following descriptions in his		✓

Activity	Justification / Detail	Determination criteria met	
		No	Yes
application	application. Sections 1-8 of J02 Operating Techniques		
Emission limits	The operator has proposed an emission limit of 1000 colony forming units per m3. This proposed limit is transcribed directly from the Technical Guidance on Composting Operations note. We have not included this limit within the permit as we are not aware of the background limits on the site currently or how they may change before the site is commissioned. Therefore a pre-operational condition is included requiring the operator to measure bioaerosol and gram negative bacteria levels at the site prior to commissioning. Further to this a monitoring exercise is required as an improvement condition to evaluate what the emissions from the site are post commissioning. Following this monuitoring exercise a report wil be sent to the Agency highlighting emissions that are excessive or breach the background level and proposals for the reduction of these emissions along with a timetable for implementation of these proposlals.		✓
Monitoring	We have decided that monitoring should be carried out for the parameters listed in table S4.1 in schedule 4 using the methods and to the frequencies specified in those tables. These monitoring requirements have been imposed in order to ensure that the site is not causing an effect with regard to bioaerosols and gram negative bacteria. Furthermore following the report assessing the emissions from site these monitoring results will provide information from which we can set a limit for the site based on actual data.		✓
Reporting	We have specified reporting as specified in Schedule 5 for the following reasons. As this is a new site quarterly monitoring and reporting were seen as approporaite to minimise the risk of local receptors being exposed to bioaerosols and gram negative bacteria.This frequency may be modified in future once a level of bioaerosol emissions has been established as not significant from an environmental perspective.		✓
Operator Competence			
Technical competence	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 The operator is a member of an agreed scheme. Adrano Paul Kyte is registered under the WAMITAB scheme at level 4TMNH William McLardy is registered under the WAMITAB scheme at level 4TSH Ian Haslam is registered under the WAMITAB scheme at level 4TSH Alan Joynson is registered under the WAMITAB scheme at level TSS4		✓
Relevant	The National Enforcement Database has been checked to		✓

Activity	Justification / Detail	Determination criteria met	
		No	Yes
Convictions	ensure that all relevant convictions have been declared. The operator satisfies the criteria in RGN 5 on Operator Competence No relevant convictions.		
Financial provision	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.		✓
OPRA			
Opra Score	The Opra score is 54 The Opra score has not changed from that set out in the application.		

Annex 2: consultation responses

Advertising and consultation

Summary of responses to advertising and consultation and the way in which we have taken these into account in the determination process:

Response received from
Food Standards Agency
Brief summary of issues raised
That we need to ensure the pre acceptance procedures at the site are suitable for the activity as without this there is an increased risk that an uncontrolled release to air or controlled waters could occur and this could have a direct or indirect adverse effect on the safety of the food chain
Summary of actions taken or show how this has been covered
No action required. Pre-acceptance procedures have been assessed as suitable for the activity.

Response received from
Trafford Borough Council Planning Department
Brief summary of issues raised
The application includes a noise assessment and related mitigation measures which are considered acceptable by environmental protection. Also as part of the planning process the Local Planning Authority wish to be provided with details of the odour controls required by the Environment Agency prior to operation of the site.
Summary of actions taken or show how this has been covered
No action required

Response received from
United Utilities
Brief summary of issues raised
They have no objection to the application. They have not received an application for a Consent to the Discharge of Trade Effluent yet. They believe that co-treatment at a sewage treatment works represents BAT for the effluent. There are no further issues.
Summary of actions taken or show how this has been covered
No action required

Response received from
Trafford Primary Care Trust
Brief summary of issues raised
The primary care trust's main causes for concern relate to point source emissions to air, bioaerosols and odour. 1. Given that the plant is new, it is recommended that the Regulator

ensures they are satisfied with the equipment that will be installed and that a suitable and robust stack monitoring strategy is proposed.

2. Estimated concentrations for ammonia and benzene have been used in the H1 assessment, therefore the applicant should re-run the H1 assessment once the site is built and actual emission data is available. We recommend the receptor (sp. Think this should read regulator) checks they are happy with the receptor locations used in the H1 assessement
3. A bioaerosol risk assessment has been carried out which refers to EA Technical Guidance on Composting Operations 2001. We would recommend that the operator use the EA position statement 2007 and Technical Guidance M17 including the current definition of appropriate levels as bioaerosol levels not exceeding:
    - Those before the start of the composting process or
    - Bioaerosols levels no greater than 1000 colony forming units (cfu) m^{-3} total bacteria, 1000 cfu m^{-3} total fungi and 300 cfu m^{-3} gram negative bacteria

4. The application suggests setting action levels at 1000 cfu m-3. However, this action level does not take into consideration the need for lower levels for gram negative bacteria. We recommend the lower levels for gram negative bacteria are included in the risk assessment.
5. It is recommended that a more detailed risk assessment for bioaerosols is performed including presentation of an evidence base for the assertion that the bioaerosols will be controlled to below acceptable levels by the operating techniques outlined
6. We recommend that the Regulator confirms that the applicant is correct in stating that a full quantitative bioaerosol risk assessment is not required. If a full quantitative risk assessment is required this should be carried out and sent to the Health Protection Agency for comment prior to permit issue
7. It is recommended that sampling to establish background levels is carried out in accordance with EA Technical Guidance M17
8. It is recommended that monitoring of bioaerosols should be carried out in accordance with EA Technical Guidance note M17, until more evidence and updated recommendations become available. Acceptable levels should be in accordance with EA position statement on bioaerosols (different that that included in the application). It is recommended that bioaerosols monitoring is performed shortly after site operations commence to confirm that the levels are acceptable.
9. Once the site is operational it should be confirmed that the maximum residual odour concentration from the stack is no more than 1200 OU_E/m^3 as this is the value used in the odour monitoring
10. The revised odour assessment should be carried out once there is actual emission data. If dispersion modelling is carried out the applicant should provide a map with isopeths so the impacts can be assessed.
11. We recommend that daily visual monitoring at the site boundary for nuisance dust and litter be made a condition of the permit.
12. These sites occasionally present odour and noise problems and we recommend that the Regulator confirm that no recent nuisance

complaints have beeen received about this installation. The nature of any recent complaints should be supplied and the Regulator should ensure that these complaints have been appropriately dealt with. This issue needs to be clarified prior to permit issue. We are satisfied that the issue of noise will be appropriately assessed by the Regulator and the local authority, who are also statutory consultees to this application.

Summary of actions taken or show how this has been covered

1. The Agency is satisfied with the equipment that will be installed and a suitable and robust stack monitoring strategy will be contained within the permit
2. There will be a condition of the permit requiring the operator re-assess the emissions from the site, including but not limited to benzene and ammonia, following commissioning of the plant using actual emission data. The Agency is happy with the receptor locations.
3. The operators bioaerosol risk assessment is acceptable. It has been evaluated using “Guidance on the evaluation of bioaerosol risk assessments for composting facilities”. We will not be using M17 as the monitoring protocol as there is a more relevant piece of guidance “Review of methods to measure bioaerosols from composting sites” published in April 2009. A pre-operational condition will be included in the permit to establish what the background level of bioaerosols is for the site prior to operations commencing. Monitoring required by the permit will be done in accordance with “Review of methods to measure bioaerosols from composting sites”.
4. Gram negative bacteria has not been assessed as part of the risk assessment from the site. However, the receptors and the emission points and pathways of dispersion would be the same as for bioaerosols. Therefore as the source pathway receptor chain has been interrupted for bioaerosols due to the activity taking place in a negative pressure building with abatement for emissions through a single point source emission stack. Further to this the pre-operational condition to establish background levels will require an assessment of Aspergillus Fumigatus and the validation improvement condition to establish actual levels of emissions from the site will also require an assessment of the levels of Aspergillus Fumigatus.
5. The Bioaerosol risk assessment is detailed enough for the Agency to make a decision. No further information will be requested
6. A quantitative bioaerosol risk assessment is not required at this stage. After the pre-operational condition has been completed and background levels of bioaerosols have been established for the site an improvement condition for the site will be included to monitor emissions from the site. If this monitoring exercise shows emissions from the site being in significant quantities or above the benchmark values the report will include a review of appropriate measures, improvements required and a timetable for implementation of these measures.
7. M17 will not be used as the pre-operational monitoring protocol. The more appropriate “Review of methods to measure bioaerosols from composting sites” published in April 2009 will be used.
8. Ongoing monitoring from the site will not be according to M17. The more appropriate “Review of methods to measure bioaerosols from

composting sites" published in April 2009 will be used. Bioaerosols monitoring will be performed shortly after site operations commence.

9. It is unnecessary to ratify the odour concentration from the stack as the odour emissions from the site will be controlled by conditions 3.3.1 and 3.3.2 which will provide a much swifter response to potential odour issues from the site rather than an improvement condition to monitor stack odours and make any improvements following an assessment of the odours and a modelling exercise.
10. Again conditions 3.3.1 and 3.3.2 of the permit will control the emissions of odour from the site. Any assessment of odour from site would be enacted under these conditions.
11. Daily visual monitoring for nuisance dust and litter has been incorporated into the permit as a specified operating technique.
12. This site has not yet been constructed and as such has had no complaints regarding operations on site. A robust complaints handling procedure will be part of the operator's ISO 14001 Environment Management System.