

# Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

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Shanks Waste Management Limited

Hespin Wood Resource Park  
Hespin Wood  
Rockcliffe  
Carlisle  
Cumbria  
CA6 4BJ

Permit number  
EPR/SP3133HW

# Hespin Wood Resource Park

## Permit number EPR/SP3133HW

### Introductory note

#### **This introductory note does not form a part of the permit**

The main features of the permit are as follows.

Hespin Wood Resource Park is a Mechanical Biological Treatment facility for up to 75000 Tonnes per year of municipal waste. The facility is located approximately 5 miles north of Carlisle and 350 metres west of the village of Todhills. The site is surrounded on three sides by landfilling activities and on the other by the West Coast Main Line railway.

The process itself is undertaken in a single building. This starts at the reception pit for all incoming wastes from where they are shredded and transferred by crane to a 'biodrying hall'. In this hall the wastes are dried aerobically by drawing air from the building through the stockpiled wastes for around 12 -15 days. This process reduces the waste mass by around 25% and stabilises the waste. The extracted air is then fed to a wood filled biofilter to control odours and is emitted from here to atmosphere.

The dried waste is removed by crane from the biodrying hall into a refinement area where it is segregated by size and type into different fractions. The key fraction is the Solid Recovered Fuel (SRF) which may then go through a further shredding process. Each fraction is stored pending off site recovery or disposal. Air is emitted to atmosphere from the refinement area via a bag filter to control particulate levels.

Any leachate or polluted runoff from the biofilter and biodrying areas will drain to an effluent tank from where it will be removed from site for disposal. Roof and yard water will drain via a settlement lagoon to a watercourse on the south of the site and ultimately to the River Border Esk. Sewage from the offices is treated in a septic tank before being pumped to a drainage mound from where it enters groundwater.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

#### **Status log of the permit**

<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/SP3133HW/A001	Duly made 24/01/11	Application for Mechanical Biological Treatment facility.
Additional information received	22/02/11	Corrected site boundary plan
Additional information received	24/02/11	Performance specification for biofilter
Additional information received	01/03/11	Information on biofilter inlet concentrations
Additional information received	07/03/11	Information on biofilter outlet concentration levels

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Additional information received	12/04/11	Part 1 of response to notice for further information.
Additional information received	27/04/11	Part 2 of response to notice for further information
Additional information received	17/06/11	Part 3 of response to notice for further information
Additional information received	29/06/11	Environmental Monitoring Plan
Additional information received	30/06/11	Odour Management Plan dated June 2011
Permit determined	08/06/11	Permit issued to Shanks Waste Management Limited

End of introductory note

# Permit

The Environmental Permitting (England and Wales) Regulations 2010

**Permit number**  
**EPR/SP3133HW**

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

**Shanks Waste Management Limited** (“the operator”),  
whose registered office is

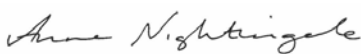
**Dunedin House**  
**Auckland Park**  
**Milton Keynes**  
**Buckinghamshire**  
**MK1 1BU**

company registration number 02393309

to operate an installation, waste operation and groundwater activity at

**Hespin Wood Resource Park**  
**Hespin Wood**  
**Rockcliffe**  
**Carlisle**  
**Cumbria**  
**CA6 4BJ**

to the extent authorised by and subject to the conditions of this permit.

Name	Date
	11 July 2011

Authorised on behalf of the Environment Agency

# Conditions

## 1 Management

### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

### 1.2 Energy efficiency

- 1.2.1 For the activity referenced in schedule 1, table S1.1 as A1 the operator shall:
- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

- 1.3.1 For the activity referenced in schedule 1, table S1.1 as A1 the operator shall:
- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

## **1.4 Avoidance, recovery and disposal of wastes produced by the activities**

- 1.4.1 The operator shall take appropriate measures to ensure that:
- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **2 Operations**

### **2.1 Permitted activities**

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

### **2.2 The site**

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

### **2.3 Operating techniques**

- 2.3.1
- (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
  - (b) If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.1 and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.

- 2.3.3 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.
- 2.3.5 The infiltration system specified in table S1.1 shall be constructed to comply with the following:
- (a) no part of the infiltration system constructed shall be more than 2 metres below ground level;
  - (b) no part of the infiltration system shall be less than 1 metre above the highest predicted annual groundwater level;
  - (c) the infiltration system shall not connect to any land drainage system;
  - (d) the infiltration system shall not be situated within 10 metres of any watercourse (including any ditch that runs dry for part of the year), or any other surface water;
  - (e) the infiltration system shall not be situated within 50 metres of a well or borehole used for water supply.
- 2.3.6 The septic tank and infiltration system shall conform to all relevant British Standards in force at the time of installation.

## **2.4 Improvement programme**

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

## **2.5 Pests**

- 2.5.1 The activities shall not give rise to pollution or hazards from pests. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

## **3 Emissions and monitoring**

### **3.1 Emissions to water, air or land**

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

### **3.2 Emissions of substances not controlled by emission limits**

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.
- 3.2.4 Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

### **3.3 Monitoring**

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.2 and S3.3;
  - (b) ambient air monitoring specified in table S3.4;
  - (c) process monitoring specified in table S3.5;
- 3.3.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.



- 3.3.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.3.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, S3.3 and S3.5 unless otherwise agreed in writing by the Environment Agency.

### **3.4 Odour**

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

### **3.5 Noise and vibration**

- 3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.5.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## **4 Information**

### **4.1 Records**

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.

- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

## **4.2 Reporting**

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report shall include as a minimum:
- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

## **4.3 Notifications**

- 4.3.1 The Environment Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
  - (b) the breach of a limit specified in the permit; or
  - (c) any significant adverse environmental effects.
  - (d) any emergency discharge that has occurred.

- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
  - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (a) any change in the operator's name or address; and
  - (b) any steps taken with a view to the dissolution of the operator.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
  - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
  - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

## **4.4 Interpretation**

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

# Schedule 1 - Operations

**Table S1.1 activities**

Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
A1	S5.3 A1 (c) (ii)	<p>Waste treatment utilising biodrying process</p> <p><b>D9</b> – physico-chemical treatment of waste resulting in final compounds or mixtures that are then themselves discarded by any of the operations numbered D1 to D12.</p> <p><b>D15</b> – storage of waste pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced).</p>	<p>No more than 750 Tonnes of waste to be stored within the waste reception pit at any one time. Total includes any waste subject to activity A3 in Table S1.1.</p> <p>Waste types as specified in Table S2.1</p> <p>All waste activities shall be undertaken utilising the biodrying process and within a building that is maintained under negative pressure with an impermeable surface and sealed drainage system.</p> <p>All air drawn from the building to maintain negative pressure shall be discharged through the biofilter.</p>
<b>Directly Associated Activity</b>			
A2	Oil storage	1200 litre storage tank	<p>Includes oil receipt and storage.</p> <p>All oil to be stored in accordance with The Control of Pollution (Oil Storage) (England) Regulations 2001</p>
<b>Description of activities for waste operations</b>			<b>Limits of activities</b>
A3	<p><b>R3:</b> Recycling/reclamation of organic substances which are not used as solvents</p> <p><b>R4:</b> Recycling/reclamation of metals and metal compounds</p> <p><b>R5:</b> Recycling/reclamation of other inorganic compounds</p> <p><b>R13:</b> Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p>		<p>No more than 750 Tonnes of waste to be stored within the waste reception pit at any one time. Total includes any waste subject to activity A1 in Table S1.1.</p> <p>Waste types as specified in Table S2.1</p> <p>All waste activities shall be undertaken within a building that is maintained under negative pressure with an impermeable surface and sealed drainage system.</p> <p>All air drawn from the building to maintain negative pressure shall be discharged through the biofilter.</p>

**Table S1.1 activities**

<b>Groundwater Activity</b>			
A4	Groundwater activity	Discharge of sewage from site offices.	Via an infiltration system centred on NGR NY 36468 62961
	Discharge into land of sewage effluent from a septic tank		<p>Discharge must not exceed 2 cubic metres per day.</p> <p>Prior to the discharge, the sewage must receive adequate treatment from a septic tank or sewage treatment plant designed and constructed according to the relevant British Standard design requirements in force at the time of installation, (currently BS EN 12566:2005) and sized in accordance with the method specified in the septic tank and sewage treatment plant manufacturer's and installer's industry Code of Practice "Flows and Loads 3"</p> <p>The sewage treatment system must be installed and operated in accordance with the manufacturer's specification issued at the time of installation or to the guidance given in the appropriate industry operating Code of Practice</p> <p>The discharge must not cause pollution of surface water or groundwater</p>

**Table S1.2 Operating techniques**

<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application	<p>The following sections of the report accompanying the application entitled '<i>Environmental Permit Application</i>' version 2 dated November 2010;</p> <p>Section 1.6 detailing process operation  Section 1.7 detailing emission control  Section 1.8 detailing management of operations  Section 1.9 detailing closure of the site  Section 2.2 detailing energy management  Section 2.3 detailing process risk management  Section 2.5 detailing raw material usage  Section 2.6 detailing water usage  Section 4.5 detailing environmental training programme  Section 4.6 detailing accident risk assessment and management  Section 5.5 detailing surface water management  Section 7.5 detailing control measures for bioaerosols</p>	05/11/10
Application – additional information received	<p>Response to questions 3b in part B of the application form and section 1.8 of the application permit report detailing technical competence</p> <p>Response to questions 3a, 4a, 4b, 6a and 6b in part B3 of the application form.</p> <p>Response to questions 1, 2, 3, 4, 5 and 6 in appendix 5 of part B3 of the application form</p>	15/12/10
Additional Information	Biofilter Filtrating Material specification dated 24/08/2010 – revision 00	24/02/11
Part 1 of response to Schedule 5 Notice dated 23/03/11	<p>Response to question 1 detailing EMS implementation</p> <p>Response to question 2 detailing oil storage</p> <p>Response to question 3 detailing waste acceptance of incompatibles</p> <p>Response to question 5 detailing fine and compost stabilisation</p> <p>Response to question 8 detailing baghouse alarms</p> <p>Response to question 9 detailing leachate pit alarms</p> <p>Response to question 10 regarding power loss</p> <p>Response to question 18 detailing groundwater discharge</p>	12/04/11
Part 2 of response to Schedule 5 Notice dated 23/03/11	Response to question 12 regarding fly control	27/04/11
Part 3 of response to Schedule 5 Notice dated 23/03/11	Fly Management Plan – Hespini Wood Intelligent Transfer Station	17/06/11
Additional information	Environmental Monitoring Plan – all parts	29/06/11
Additional information	Odour Management Plan Version 4 dated June 2011	30/06/11

**Table S1.3 Improvement programme requirements**

<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	<p>The operator shall review the results of the bioaerosol monitoring undertaken both on and off site (as stipulated in tables S3.1 and S3.4). The review must include an assessment of the validity of the qualitative bioaerosol risk assessment provided with the application to actual results obtained during such monitoring.</p> <p>A written summary report of the findings of this review must be provided to the Environment Agency. The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the summary report.</p> <p>If the review demonstrates that the qualitative risk assessment does not remain valid, the operator shall submit proposals for a quantitative risk assessment (and proposed timetable for its implementation) to the Environment Agency for approval in writing.</p> <p>.</p> <p>The operator must undertake the quantitative risk assessment as approved, and from the date stipulated by the Environment Agency.</p>	1 February 2012

## Schedule 2 - Waste types, raw materials and fuels

**Table S2.1 Permitted waste types and quantities for acceptance at the Mechanical Biological Treatment plant**

Maximum quantity	75,000 tonnes per year
<b>Waste code</b>	<b>Description</b>
20 01 01	Paper and cardboard
20 01 02	Glass
20 01 08	Biodegradable kitchen and canteen waste
20 01 10	Clothes
20 01 11	Textiles
20 01 25	Edible oil and fat
20 01 28	Paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	Detergents other than those mentioned in 20 01 29
20 01 32	Medicines other than those mentioned in 20 01 31
20 01 34	Batteries and accumulators other than those mentioned in 20 01 33
20 01 36	Discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 38	Wood other than that mentioned in 20 01 37
20 01 39	Plastics
20 01 40	Metals
20 01 41	Wastes from chimney sweeping
20 02 01	Biodegradable waste
20 02 02	Soil and stones
20 02 03	Other non-biodegradable waste
20 03 01	Mixed municipal waste
20 03 02	Waste from markets
20 03 03	Street-cleaning residues
20 03 07	Bulky waste



## Schedule 3 – Emissions and monitoring

**Table S3.1 Point source emissions to air – emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in Schedule 7]	Benzene	Biofilter	No limit set	1.5 hours	Weekly until the biofilter is shown to be operating effectively and efficiently	BS EN 13649:2002
	Ammonia		No limit set	1.5 hours		BS EN 14791 (adapted to suit ammonia)
	Hydrogen Sulphide		No limit set	1.5 hours		US EPA Method 11
	Bioaerosols – Yeasts and Moulds		As agreed under Improvement Condition 1	In accordance with 'Standardised Protocol for the Monitoring of Bioaerosols at Open Composting Facilities' NOTE 1	Monthly thereafter	In accordance with 'Standardised Protocol for the Monitoring of Bioaerosols at Open Composting Facilities' NOTE 1
	Bioaerosols – Total Viable Count (TVC)		As agreed under Improvement Condition 1			
	Odour		No limit set	Determined in accordance with BS EN 13725:2003	Annual	BS EN 13725: 2003
A2 [Point A2 on site plan in schedule 7]	Particulate matter	Baghouse stack from refinement area	10 mg/m <sup>3</sup>	Hourly average	Annual	BS EN 13284-1

NOTE 1 – Published by the Association for Organics Recycling.(AFOR) 2009

**Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
SW1 on site plan in schedule 7 emission of surface water to tributary of Peter Syke	No parameters set	Uncontaminated surface water from hardstanding and roofed areas	No limit set	-	-	-

**Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
GW1 on site plan in schedule 7 emission to drainage mound	No parameters set	Foul water consisting of domestic sewage from offices	No limit set	-	-	-

**Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
Leachate sump prior to transfer off site for disposal	Ammoniacal Nitrogen	Biodrying hall, MSW reception pit, shredded waste pit, refinement area and biofilter leachate.	None	None	Monthly	UKAS accredited laboratory
	BOD					
	COD					
	Chloride					
	Electrical Conductivity					
	Iron					
	pH					
	Suspended Solids					
	Cadmium	Biodrying hall, MSW reception pit, shredded waste pit, refinement area and biofilter leachate.	None	None	Quarterly	
	Calcium					
	Chromium					
	Copper					
	Lead					
	Magnesium					
	Manganese					
	Nickel					
	Nitrate					
	Nitrite					
	Potassium					
	Sodium					
	Sulphate					
	Total Alkalinity					
	TOC					
	TON					
	Zinc					

**Table S3.4 Ambient air monitoring requirements**

Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Six locations along northern boundary of site	Flies	Weekly	As detailed within the Environmental Monitoring Plan received 29 June 2011	From first Monday in March until last Sunday in October only.  Locations to correspond with those used in 2010 survey
Locations up and down wind of site chosen in accordance with 'Standardised Protocol for the Monitoring of Bioaerosols at Open Composting Facilities', NOTE 1	Bioaerosols	Annual	In accordance with 'Standardised Protocol for the Monitoring of Bioaerosols at Open Composting Facilities', NOTE 1	

NOTE 1 – Published by the Association for Organics Recycling.(AFOR) 2009

**Table S3.5 Process monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Inlet Air to Biofilter	Temperature	Weekly until the biofilter is shown to be operating effectively and efficiently	None specified	As detailed in Odour Management Plan dated June 2011 and submitted on 30 June 2011
	Humidity		None specified	
	Benzene		BS EN 13249:2002	
	Hydrogen Sulphide		US EPA Method 11	
	Ammonia		BS EN 14791 (adapted to suit ammonia)	
		Monthly thereafter		
	Total Odour	Annual	BS EN 13725:2003	Results to be reported in $OU_E / m^3$
Biofilter bed	Temperature	Daily	None specified	As detailed in Odour Management Plan dated June 2011 and submitted on 30 June 2011
	Humidity			
				Monitoring to be undertaken at two locations for each parameter.

## Schedule 4 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

**Table S4.1 Reporting of monitoring data**

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.3.1.	A1, A2	Quarterly	1 July 2011,
Ambient air monitoring Parameters as required by condition 3.3.1	As shown in Table S3.4	Every 12 months	1 July 2011

**Table S4.2 Reporting forms**

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	01/07/11

## Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

### Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

**(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution**

**To be notified within 24 hours of detection**

Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

**(b) Notification requirements for the breach of a limit**

**To be notified within 24 hours of detection unless otherwise specified below**

Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

<b>(c) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

### Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

<b>Name*</b>	
<b>Post</b>	
<b>Signature</b>	
<b>Date</b>	

\* authorised to sign on behalf of the operator

## Schedule 6 - Interpretation

*“accident”* means an accident that may result in pollution.

*“application”* means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

*“authorised officer”* means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

*“disposal”*. Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

*“emissions to land”* includes emissions to groundwater.

*“emissions of substances not controlled by emission limits”* means emissions of substances to air, water or land from the activities, *either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.*

*“EP Regulations”* means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

*“groundwater”* means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

*“hazardous property”* has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

*“MCERTS”* means the Environment Agency’s Monitoring Certification Scheme.

*“Pests”* means Birds, Vermin and Insects..

*“quarter”* means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

*“recovery”* means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

*“Waste code”* means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

*“Waste Framework Directive” or “WFD”* means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

*“year”* means calendar year ending 31 December.

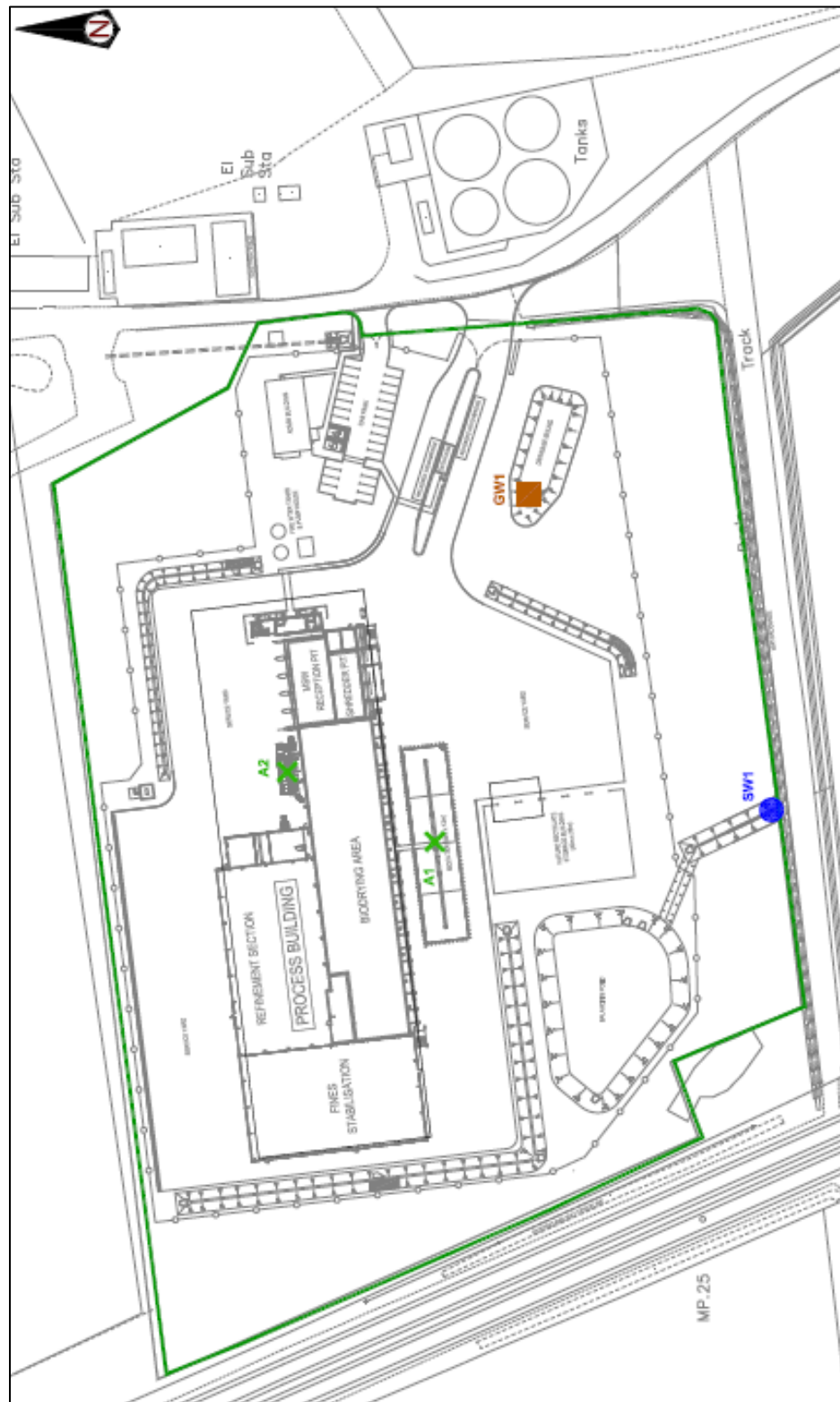
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content



## Schedule 7 - Site plan



END OF PERMIT

Permit Number: SP3133HW  
 Facility: Hespin Wood Resource Park

Operator: Shanks Waste Management Limited  
 Form Number: Air1 / 01/07/11

Reporting of emissions to air for the period from .....to.....

Emission Point	Emission			Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
	Substance / Parameter	Limit Value	Reference Period				
A1	Benzene	No limit set	1.5 hours		BS EN 13249:2002		
A1	Ammonia	No limit set	1.5 hours		BS EN 14791		
A1	Hydrogen Sulphide	No limit set	1.5 hours		US EPA Method 11		
A1	Odour	No limit set	Determined in accordance with BS EN 13725: 2003		BS EN 13725: 2003		
A2	Particulate Matter	10 mg/m <sup>3</sup>	Hourly average		BS EN 13284-1		

The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.

For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....

Date.....

(Authorised to sign as representative of Operator)