



ENVIRONMENT  
AGENCY

## Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

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South Side Queensway  
Non-Hazardous Landfill  
Llanwern Works  
Newport  
Gwent  
NP19 4QZ

Permit number  
GP3331SV

# South Side Queensway Non-hazardous Landfill

## Permit Number GP3331SV

### Introductory note

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

The main features of the installation are as follows.

South Side Queensway non-hazardous landfill (SSQNHL) lies immediately to the south of the Llanwern Steelworks to the east of Newport. The centre of the site is located approximately at National Grid Reference ST 381 857. Access to the site is only possible through the steelworks, and is off the Queensway Road which runs east to west through the plant.

SSQNHL is a non-hazardous in-house disposal facility for the Llanwern steel plant. The tonnage of waste currently produced by the site amounts to 13,500 tonnes per annum. The SSQ area comprises a large area of land that has been used since the early 1970's for various waste management activities. The waste regulation authority, Newport Borough Council, issued a COPA Waste Disposal Licence (WDL007/92) for the disposal of waste materials originating within the works within the SSQ site. This licence was subsequently transposed from the COPA regime to 'Waste Management Licence (WML) 024/79. Part of the SSQ site has been taken into the existing steelworks PPC Permit. The PPC Application proposes to bring the WML area marked on drawing ESID 2 (former Lagoon 26) into the PPC regime.

SSQNHL is situated on a naturally occurring geological barrier of low permeability Holocene sequence made up of an Upper and Lower clay separated by a peat horizon that overlying Mercia Mudstone. The closest water courses to the site which are not part of the site's own drainage infrastructure are the Elver Pill Reen and the Hundred Perches Reen. The site does not lie within a Source Protection Zone (SPZ), it overlies a non-aquifer and it is not susceptible to flooding. A review of nature protection areas has been extended to a 5 km radius for the site.

This search has confirmed that there are both SSSIs and European Habitat sites within 5 km of the installation boundary. The SSSIs in question are the Gwent Levels. This is made up of four constituent parts. Gwent Levels SSSIs: Whitson (0.149 km), Redwick and Llandeenny (1km), Nash and Goldcliff (1.2 km) and Magor and Undy (4 km). The relevant European sites are the River Usk Special Area of Conservation (SAC) (5 km) and the Severn Estuary Special Protection Area/ Ramsar/ SAC (3km).

Status log of the permit		
Detail	Date	Response Date
Application GP3331SV	Received 07/02/2006	
Response to request for information	Request dated 23/11/2006	Response dated 22/12/2006
Permit determined	14/08/2007	

Other PPC Permits relating to this installation		
Permit holder	Permit Number	Date of Issue
Corus UK Ltd, Llanwern Steelworks	BS3905IP	18/03/2004

Superseded or partially superseded licences/authorisations/consents relating to this installation			
Holder	Reference Number	Date of Issue	Fully or Partially Superseded
Corus (UK) Limited	EAWML/30009	25/10/1978	Fully superseded

End of Introductory Note

## Permit

Pollution Prevention and Control (England and Wales) Regulations 2000  
Landfill (England and Wales) Regulations 2002

## Permit

Permit number

**GP3331SV**

The Environment Agency (the Agency) in exercise of its powers under regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No 1973) and regulation 6 of the Landfill (England and Wales) Regulations 2002 (SI 2002 No.1559) hereby authorises

**Corus (UK) Limited** ("the operator"),

whose registered office is

30 Millbank

London

SW1P 4WY

**Company registration number 2280000**

to operate at

**South Side Queensway Non-Hazardous Landfill**

**Corus Strip Products**

**Llanwern Works**

**Newport**


**Gwent**

**NP19 4QZ**

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

Signed

Date

	14/08/2007
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Gavin Bown

Authorised to sign on behalf of the Agency

# Conditions

## 1. Management

### 1.1 General management

- 1.1.1 The activities shall be managed and operated:
- (a) in accordance with a management system, which identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents and non-conformances and those drawn to the attention of the operator as a result of complaints; and
  - (b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.
- 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.

### 1.2 Accidents that may cause pollution

- 1.2.1 The operator shall:
- (a) maintain and implement an accident management plan;
  - (b) review and record at least every 4 years or as soon as practicable after an accident, (whichever is the earlier) whether changes to the plan should be made;
  - (c) make any appropriate changes to the plan identified by a review.

### 1.3 Finance

- 1.3.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Agency dated 14/08/2007 shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Agency.
- 1.3.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover the cost of operating the landfill, as far as possible the cost of the financial provision required by condition 1.3.1 and thus the estimated costs for the closure and aftercare of the landfill.

### 1.4 Energy efficiency

- 1.4.1 The operator shall:
- (a) Review and record at least every 4 years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (b) Implement any appropriate measures identified by a review.

## **1.5 Site security**

- 1.5.1 Site security measures shall prevent unauthorised access to the site, as far as practicable.

# **2. Operations**

## **2.1 Permitted activities**

- 2.1.1 The operator is 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 blue on the site plan at schedule 2 to this permit.

## **2.3 Operating techniques**

- 2.3.1 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 Agency.

## **2.4 Off-site conditions**

There are no conditions in this permit to which regulation 12(12) of the PPC Regulations apply.

## **2.5 Improvement programme**

- 2.5.1 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 Agency.
- 2.5.2 Except in the case of an improvement which consists only of a submission to the Agency, the operator shall notify the Agency within 14 days of completion of each improvement.

## **2.6 Pre-operational conditions**

There are no pre-operational conditions in this Permit.

## **2.7 Engineering**

- 2.7.1 No construction of any new cell shall commence until the operator has submitted construction proposals and the Agency has confirmed that it is satisfied with the construction proposals.
- 2.7.2 The construction of a new cell shall take place only in accordance with the approved construction proposals unless:
- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or

- (b) a change has otherwise been agreed in writing by the Agency.
- 2.7.3 No disposal of waste shall take place in a new cell until the operator has submitted a CQA Validation Report and the Agency has confirmed that it is satisfied with the CQA Validation Report.
- 2.7.4 No construction of landfill Infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Agency has confirmed that it is satisfied with the construction proposals.
- 2.7.5 The construction of the landfill Infrastructure shall take place only in accordance with the approved construction proposals unless:
  - (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
  - (b) a change has otherwise been agreed in writing by the Agency.
- 2.7.6 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant landfill Infrastructure.
- 2.7.7 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.7.4 and 2.7.5 do not apply and the relevant landfill Infrastructure may be constructed, provided that the construction proposals are submitted to the Agency as soon as practicable.
- 2.7.8 For the purposes of conditions 2.7.1, 2.7.3 and 2.7.4, the Agency shall be deemed to be satisfied where it has not, within the period of 4 weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
  - (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.

## **2.8 Waste acceptance**

- 2.8.1 Wastes shall only be accepted for disposal if:
  - (a) they are listed in schedule 3, and
  - (b) they are non- hazardous waste, and
  - (c) they are not whole used tyres (other than bicycle tyres and tyres with an outside diameter of more than 1400mm), and
  - (d) they are not shredded used tyres, and
  - (e) they are not liquid waste, and
  - (f) they are not chemical substances from research and development or teaching activities, for example laboratory residues, which are unidentified and/or which are new and whose effects on man and/or the environment are unknown, and
  - (g) all the relevant waste acceptance procedures set out in schedule 1 of the Landfill Regulations have been completed, and
  - (h) they fulfil the relevant waste acceptance criteria, and
  - (i) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and

- (j) from 30<sup>th</sup> October 2007 they are wastes which have been treated, except for: inert wastes for which treatment is not technically feasible; or it is waste other than inert waste and treatment would not reduce its quantity or the hazards which it poses to human health or the environment, [or liquid waste accepted for treatment at a permitted leachate treatment activity.
  - (k) any code beginning with 07 05 and 16 03 shall exclude waste medicinal products and pharmaceutically active waste materials arising from their manufacture
- 2.8.2 The operator shall visually inspect:
  - (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill or at the point of dispatch; and
  - (b) waste at the point of deposit;and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.
- 2.8.3 Where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.
- 2.8.4 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.8.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing ESID11.
- 2.8.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.4.
- 2.8.7 The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or recovery and of the identity of the producer, or in the case of municipal waste and multiple collection vehicles, of the collector of such waste. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

## **2.9 Leachate levels**

- 2.9.1 The limits for the level of leachate listed in schedule 4 table S4.1 shall not be exceeded.

## **2.10 Closure, aftercare and decommissioning**

- 2.10.1 The operator shall maintain and operate the activities so as to prevent or where that is not practicable, to minimise, any pollution risk on closure and decommissioning.
- 2.10.2 The operator shall maintain a site closure plan which demonstrates how the activities can be decommissioned to avoid any pollution risk and return the site of operation to a satisfactory state.
- 2.10.3 The operator shall carry out and record a review of the site closure plan at least every 4 years.
- 2.10.4 The site closure plan (or relevant part thereof) shall be implemented on final cessation or decommissioning of the activities or part thereof.



## **2.11 Site protection and monitoring programme**

- 2.11.1 The operator shall, a minimum of 3 months prior to undertaking the relevant activity, submit a Site Protection and Monitoring Programme.
- 2.11.2 The operator shall implement and maintain the Site Protection and Monitoring Programme in relation to all areas which will not comprise permanent deposits of waste and shall carry out and record a review of it at least every 4 years commencing from the date the Site Protection and Monitoring Programme was received.

## **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 4 table S4.2.
- 3.1.2 The limits given in that schedule shall not be exceeded, save that compliance with an emission limit shall include incorporation of the uncertainty allowance stated in Agency guidance LFTGN 05 and LFTGN 08.

### **3.2 Emissions to groundwater**

- 3.2.1 There shall be no emission from the activities into groundwater of any substance in List I (as defined by the Groundwater Regulations) contrary to those regulations.
- 3.2.2 There shall be no emission from the activities into groundwater of any substance in List II (as defined in the Groundwater Regulations) so as to cause pollution (as defined in those regulations).
- 3.2.3 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in schedule 4 Table S4.3 shall not be exceeded.
- 3.2.4 The operator shall submit to the Agency a review of the Hydrogeological Risk Assessment:
  - (a) between 9 and 6 months prior to the fourth anniversary of the granting of the permit, and
  - (b) between 9 and 6 months prior to every subsequent 4 years after the fourth anniversary of the granting of the permit.

### **3.3 Fugitive emissions of substances**

- 3.3.1 Fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.3.2 Litter or mud arising from the activities shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been used to prevent or where that is not practicable to minimise, the litter and mud.
- 3.3.3 Litter or mud arising from the activities shall be cleared from affected areas outside the site as soon as practicable.

- 3.3.4 All liquids, 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.
- 3.3.5 The limits for landfill gas arising from the installation set out in schedule 4, tables S4.4, shall not be exceeded.
- 3.3.6 The limits for particulate matter arising from the installation set out in schedule 4, table S4.10, shall not be exceeded.

### **3.4 Odour**

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures 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 annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the noise and vibration.

### **3.6 Monitoring**

- 3.6.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake the monitoring specified in the following tables in schedule 4 to this permit:
- (a) Leachate specified in tables S4.1 and S4.7;
  - (b) Point source emissions specified in tables S4.2;
  - (c) Groundwater specified in tables S4.3 and S4.9;
  - (d) Landfill gas specified in tables S4.4, S4.5 and S4.6;
  - (e) Surface water specified in table S4.8; and
  - (f) Particulate matter specified in table S4.10.
- 3.6.2 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.
- 3.6.3 A topographical survey of the site referenced to ordnance datum shall be carried out:
- (a) annually, and
  - (b) prior to the disposal of waste in any new cell or new development area of the landfill, and
  - (c) following closure of the landfill or part of the landfill.

The topographical survey shall be used to produce a plan of a scale adequate to show the surveyed features of the site.

- 3.6.4 Within 6 months of the issue of this permit, unless otherwise agreed in writing by the Agency, the site reference data identified in the Site Protection and Monitoring Programme shall be collected and submitted to the Agency.

### **3.7 Transfers off-site**

- 3.7.1 Records of all the wastes sent off site from the activities, for either disposal or recovery, shall be maintained.

## **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 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) the results of groundwater and surface water monitoring;
  - (ii) the Site Protection and Monitoring Programme;
  - (iii) sub-surface landfill gas monitoring;
  - (iv) leachate levels, quality and quantities;
  - (v) landfill gas generation and collection;
  - (vi) waste types and quantities; and
  - (vii) the specification and as built drawings of the basal, sidewall and capping engineering systems

- 4.1.2. Any records required to be made by this permit shall be supplied to the Agency within 14 days where the records have been requested in writing by the Agency.

- 4.1.3. All records required to be held by this permit shall be held on site and shall be available for inspection by the Agency at any reasonable time.

### **4.2 Reporting**

- 4.2.1 A report or reports on the performance of the activities over the previous year shall be submitted to the Agency by 31 January (or other date agreed in writing by the Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto;
  - (b) where the operator's management system encompasses annual improvement targets, a summary report of the previous year's progress against such targets;
  - (c) the energy consumed at the site, reported in the format set out in schedule 5 table S5.3
  - (d) the annual production/treatment set out in schedule 5 table S5.2;
  - (e) details of any contamination or decontamination of the site which has occurred;
  - (f) the topographical surveys required by condition 3.6.3 other than those submitted as part of a CQA validation report;
  - (g) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
  - (h) an assessment of the settlement behavior of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
  - (i) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;
  - (j) a summary of the WAC compliance testing undertaken in the period.
- 4.2.2 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the 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 5 Table S5.1;
  - (b) for the reporting periods specified in schedule 5 Table S5.1 and using the forms specified in schedule 5 Table S5.4; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.3 A summary report of the waste types and quantities accepted and removed from the site shall be made for each quarter. It shall be submitted to the Agency within one month of the end of the quarter and shall be in the format required by the Agency.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding 4 years, submit to the Agency, within 6 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 All reports and notifications required by the permit shall be sent to the Agency using the contact details supplied in writing by the Agency
- 4.2.6 The results of reviews and any changes made to the Site Protection and Monitoring Programme shall be reported to the Agency, within 1 month of the review or change.

## 4.3 Notifications

- 4.3.1 The Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;
  - (b) the breach of a limit specified in the permit;
  - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 6 to this permit within the time period specified in that schedule.
- 4.3.3 Prior written notification shall be given to the Agency of the following events and in the specified timescales:
- (a) as soon as practicable prior to the permanent cessation of any of the permitted activities;
  - (b) as soon as practicable prior to the cessation of the landfill disposal activities, for a period likely to exceed 1 month; and
  - (c) at least 7 days prior to the resumption of the landfill disposal activities after a cessation notified under (b) above.
- 4.3.4 Where the 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 Agency when the relevant monitoring is to take place. The operator shall provide this information to the Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.5 The Agency shall be notified within 7 days of any changes in technically competent management and the name of any incoming person together with evidence that such person has the required technical competence.
- 4.3.6 The Agency shall be provided, within 14 days of the operator or any relevant person being convicted of a relevant offence, (unless such information has already been notified to the Agency), with details of the nature of the offence, the place and date of conviction, and the sentence imposed.
- 4.3.7 The Agency shall be notified within 14 days of the operator and/or any relevant person lodging an appeal against a conviction for any relevant offence and of the outcome when the appeal is decided.
- 4.3.8 The Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- (a) any change in the operator's trading name, registered name or registered office address;
  - (b) any change to particulars of the operator's ultimate holding company (including details of an ultimate holding company where an operator has become a subsidiary); and
  - (c) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

## **4.4 Interpretation**

- 4.4.1 In this permit the expressions listed in schedule 7 shall have the meaning given in that schedule.

# Schedule 1 - Operations

Table S1.1 Activities		
Activity listed in Schedule 1 of the PPC Regulations	Description of specified activity	Limits of specified activity
Section 5.2 Part A(1) (a) , The disposal of waste in a landfill.	Landfill for non-hazardous waste (landfill classification under the Landfill Regulations 2002)	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in the conditions in Section 2.8, as an integral part of landfilling.
Directly Associated Activity		
Landfill gas flaring	Flaring of landfill gas for disposal in an appliance.	Landfill gas arising from the landfill.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	<p>The responses to questions B2.1, B2.2, B2.3, B2.4, B2.5, B2.7, B2.8, B2.9 and B2.11 of Part B of the Landfill Application Form</p> <p>Excluding the answers to the following questions:</p> <p>B1.4.2 (relating to how drainage channels identified within the installation boundary will be excavated and backfilled).</p> <p>B2.2.52 (relating to perimeter landfill gas monitoring parameters), B2.2.53 (relating to in waste landfill gas monitoring parameters).</p> <p>B2.2.53 (relating to surface landfill gas monitoring).</p> <p>B2.2.64 and B2.2.67 (relating to particulate and odour management and monitoring).</p>	07/02/2006
Response to Schedule 4 Notice	All	22/12/2006

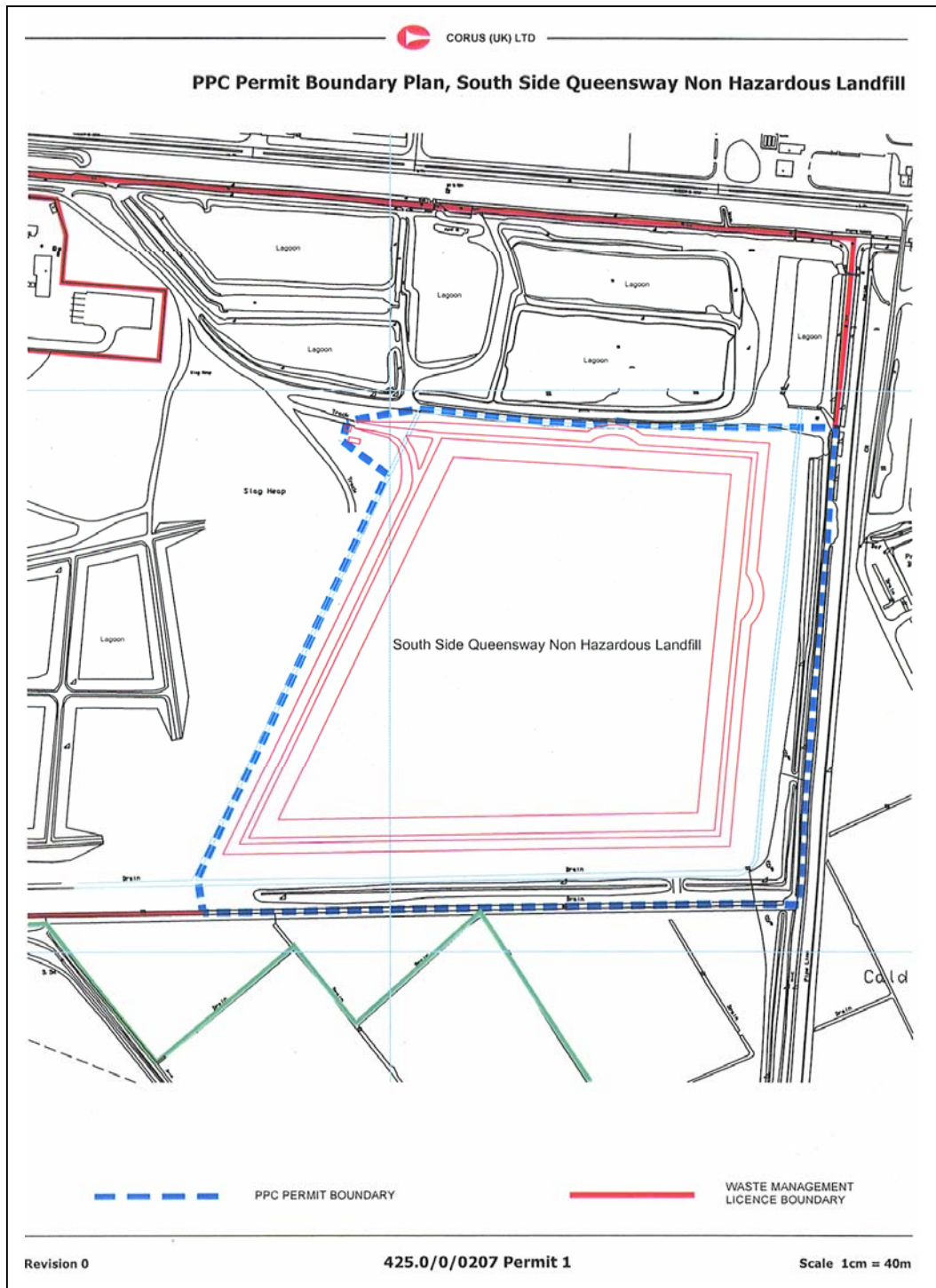
Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
Table S1.3 [1]	The Operator shall submit to the Agency for approval, a method statement detailing how any drainage channels identified within the installation boundary will be excavated and backfilled.	By 30/09/2007
Table S1.3 [2]	<p>The Operator shall calculate and submit to the Agency for approval, revised limits for methane and carbon dioxide for perimeter gas monitoring boreholes GA8, GA9, GA10, GA11, GA12, GA13, GA14, GA15, GA16, GA17, GA18, GA19, GA20, GA21, GA22 and GA23 shown on drawing MR2.</p> <p>The limits shall be based on at least 12 data sets for each monitoring location and shall be calculated in accordance with LFTGN03 'Guidance on the Management of Landfill Gas'.</p> <p>Once approved, the limits shall supersede those prescribed in Table S4.4 of this Permit.</p>	By 31/08/2008
Table S1.3 [3]	The Operator shall submit to the Agency for approval, management assessment levels for carbon dioxide and methane for in-waste gas monitoring wells for incorporation into the Gas Monitoring and Action Plan.	Within 2 months of individual cell completion
Table S1.3 [4]	The Operator shall undertake further modelling of short-term surface emissions of hydrogen sulphide and submit the results, along with an interpretative report and any recommendations, to the Agency for approval.	By 30/11/2007
Table S1.3 [5]	The Operator shall submit to the Agency for approval, a revised Contingency Action Plan (as detailed in Table MR24 of the Application), which shall include a review of the time periods for the instigation of corrective measures with regards to odour and dust.	By 30/09/2007

<b>Table S1.4 Annual waste input limits</b>	
<b>Category</b>	<b>Limit Tonnes/ Year</b>
Non - hazardous waste	10,000
Inert Waste	3,500

<b>Table S1.5 Appropriate measures for fugitive emissions</b>	
<b>Measure</b>	<b>Dates</b>
Monitoring to be carried out in accordance with Table S4.10	Monitoring to be carried out in accordance with Table S4.10



## Schedule 2 - Site plan



## Schedule 3 - List of permitted wastes

EWC Code	Description	Waste Category
10 02 01	Waste from the processing of slag	
10 02 08	Soild waste from gas treatment not containing dangerous substances	Non- haz, Non- biodegradable
10 02 10	Millscales	Non- haz, Non- biodegradable
10 02 12	Wastes from cooling water treatment not containing oil	Non- haz, Non- biodegradable
12 01 17	Waste blasting material not containing dangerous substances	
15 01 03, or 20 01 38	Wooden packaging, or wood not containing dangerous substances	Non- haz, Non- biodegradable
15 02 03	Absorbants, filter materials, wiping cloths and protective clothing not contaminated by dangerous substances	Non- haz, Non- biodegradable
16 11 04	Other linings and refractories from metallurgical processes not containing dangerous substances	Non- haz, Non- biodegradable
17 05 04	Soil and stones not containing dangerous substances	Non- haz, Non- biodegradable
17 05 08	Track ballast not containing dangerous substances	Non- haz, Non- biodegradable
17 09 04	Mixed construction waste and demolition wastes not containing dangerous substances	Non- haz, Non- biodegradable
19 09 05	Saturated or spent ion exchange resin	Non- haz, Non- biodegradable
20 01 08	Biodegradable kitchen and canteen wastes	Non- haz, Biodegradable
20 02 01	Biodegradable waste	Non- haz, Biodegradable
20 03 01	Mixed municipal waste	Non- haz, Biodegradable

## Schedule 4 – Emissions and monitoring

**Table S4.1 Leachate level limits and monitoring requirements**

Monitoring point reference/ Description	Limit	Monitoring frequency	Monitoring method
Leachate monitoring points: L1, L2, L3, L4, L5 and L6 shown on drawing MR2	2.0m above cell base	Weekly	In accordance with Environment Agency Guidance LFTGN02 Monitoring Landfill Leachate, Groundwater and Surface Water.

**Table S4.2 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
Proposed landfill gas flare	Oxides of Nitrogen	Landfill Gas Flare	150 mg/m <sup>3</sup>	Hourly mean	Annually	In accordance with Environment Agency Guidance LFTGN05 Guidance for Monitoring Enclosed Landfill Gas Flares.
	CO	Landfill Gas Flare	50 mg/m <sup>3</sup>	Hourly mean	Annually	
	Total VOCs	Landfill Gas Flare	10 mg/m <sup>3</sup>	Hourly mean	Annually	
	NMVOCs	Landfill Gas Flare	5 mg/m <sup>3</sup>	Hourly mean	Annually	

**Table S4.3 Trigger levels for emissions into groundwater and monitoring requirements**

Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
GW1, GW7, GW8 and GW9 shown on drawing MR2	NH4-N	31 mg/l	Spot Sample	Monthly	In accordance with Environment Agency Guidance LFTGN02 Monitoring Landfill Leachate, Groundwater and Surface Water.
	Chloride	3438 mg/l	Spot Sample		

**Table S4.4 Landfill gas in external monitoring boreholes – limits and monitoring requirements**

Monitoring point Ref. /description	Parameter	Limit (including units) <sup>1</sup>	Monitoring frequency	Monitoring standard or method
GA8, GA9, GA10, GA11, GA12, GA13, GA14, GA15, GA16, GA17, GA18, GA19, GA20, GA21, GA22 and GA23 shown on drawing MR2.	Methane Carbon Dioxide Oxygen Hydrogen sulphide Atmospheric pressure Differential Pressure Temperature Meteorological data	1 %v/v 1.5 %v/v no limit no limit no limit no limit no limit no limit	Monthly	In accordance with Environment Agency Guidance LFTGN03 Guidance on the Management of Landfill Gas.

1 - Limits are interim and subject to revision in accordance with Table S1.3 [2]

**Table S4.5 Landfill gas from capped surfaces - monitoring requirements**

Monitoring point Ref. /description	Parameter	Limit (including unit)	Monitoring frequency	Monitoring Standard or method
Permanently capped zone	Average Methane flux	0.001 mg/m <sup>2</sup> /second	Annually	As per LFTGN 07 or as otherwise agreed in writing by the Agency
Temporarily capped zone	Average Methane flux	0.1 mg/m <sup>2</sup> /second	Annually	

**Table S4.6 Landfill gas – other monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
In-waste gas monitoring boreholes GA1, GA2, GA3, GA4, GA5, GA6 and GA7 shown on drawing MR2.	Methane Carbon Dioxide Oxygen Hydrogen sulphide Flow rate Volume Atmospheric pressure Differential pressure Temperature Meteorological Data	Monthly	In accordance with Environment Agency Guidance LFTGN03 Guidance on the Management of Landfill Gas.	None
Gas collection system from the extraction line prior to the disposal system.	Trace components	Annually	In accordance with Environment Agency Guidance LFTGN04 Guidance for Monitoring Trace Components in Landfill Gas.	None

**Table S4.7 Leachate– other monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
L1, L2, L3 and L4 shown on drawing MR2	Water level, Temperature, pH, EC, NH <sub>4</sub> -N, TON, TOC, BOD, COD, Al, As, B, Cd, CrO <sub>3</sub> , Cr, Cu, Fe, Pb, Mn, Hg, P, SiO <sub>2</sub> , Ti, Sn, Va, Zn, Ca, Mg, Nitrate, Nitrite, Na, K, PO <sub>4</sub> , SO <sub>4</sub> , Total Alkalinity, Cl, TPH, Total PAH, VOC's and Semi VOC's.	Monthly for 12 months then quarterly	In accordance with Environment Agency Guidance LFTGN02 Monitoring Landfill Leachate, Groundwater and Surface Water.	None

Table S4.8 Surface water – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10 and SW11 shown on drawing MR2.	Temperature, DO, TSS, pH, EC, NH <sub>4</sub> -N, TON, TOC, BOD, Fe, Mn, COD, Zn, Ca, Mg, Nitrate, Nitrite, Na, K, PO <sub>4</sub> , SO <sub>4</sub> , Total Alkalinity, TPH, Total PAH and Cl.	Monthly	In accordance with Environment Agency Guidance LFTGN02 Monitoring Landfill Leachate, Groundwater and Surface Water.	None

Table S4.9 Groundwater – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8 and GW9 shown on drawing MR2.	Water level, Temperature, pH, EC, NH <sub>4</sub> -N, TON, TOC, Al, As, B, Cd, CrO <sub>3</sub> , Cr, Cu, Fe, Pb, Mn, Hg, P, SiO <sub>2</sub> , Ti, Sn, Va, Zn, Ca, Mg, Nitrate, Nitrite, Na, K, PO <sub>4</sub> , SO <sub>4</sub> , Total Alkalinity, Cl, TPH, Total PAH, VOC's and Semi VOC's.	Monthly	In accordance with Environment Agency Guidance LFTGN02 Monitoring Landfill Leachate, Groundwater and Surface Water.	None

Table S4.10 Particulate matter in ambient air - limits and monitoring requirements					
Monitoring Point Ref. /Description	Parameter	Limit (Including Unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
D1, D2 and D3 shown on drawing MR2.	Gross depositional rates	200 mg/m <sup>2</sup> /day	24 hour mean	Annually	In accordance with Environment Agency Guidance M17 Monitoring of Particulate Matter in Ambient Air around Waste Facilities.
	Soiling by sticky pad	0.5 % effective area coverage (EAC) per day	24 hour mean	Annually	

## Schedule 5 - Reporting

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

<b>Table S5.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Leachate levels As required by condition 3.6.1	L1, L2, L3, L4, L5 and L6 shown on drawing MR2	Every 3 months	14/11/07
Emissions to air Parameters as required by condition 3.6.1	Landfill gas flare	Every 12 months	14/08/08
Groundwater Parameters as required by condition 3.6.1	GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8 and GW9 shown on drawing MR2.	Every 3 Months	14/11/07
Landfill gas surface emissions Parameters as required by condition 3.6.1	Permanently capped areas and temporarily capped areas (within Cells 1a, 1b, 1c, 2a, 2b and 2c).	Every 12 months	14/08/08
Particulate matter Parameters as required by condition 3.6.1	D1, D2 and D3 shown on drawing MR2.	Every 12 months	14/08/08
Landfill gas lateral migration Parameters as required by condition 3.6.1	GA8, GA9, GA10, GA11, GA12, GA13, GA14, GA15, GA16, GA17, GA18, GA19, GA20, GA21, GA22 and GA23 shown on drawing MR2.	Every 3 months	14/11/07
Other Landfill gas monitoring Parameters as required by condition 3.6.1	GA1, GA2, GA3, GA4, GA5, GA6 and GA7 shown on drawing MR2.	Every 3 months	14/11/07
	Trace gas analysis	Every 12 months	
Other leachate monitoring Parameters as required by condition 3.6.1	L1, L2, L3 and L4 shown on drawing MR2	Every 3 months	14/11/07
Other surface water monitoring Parameters as required by condition 3.6.1	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10 and SW11 shown on drawing MR2.	Every 3 months	14/11/07

<b>Table S5.2: Annual production/treatment</b>	
Leachate: Disposed of off site; Disposed of to any onsite effluent treatment plant; Recirculated into the waste mass.	Cubic metres/year
Surface water and/ or groundwater: Disposed of off site; Disposed of to any onsite effluent treatment plant.	Cubic metres/year
Landfill gas: combustion in flares; combustion in gas engines; Other methods of gas utilisation.	Normalised cubic metres/year

**Table S5.3 Performance Parameters**

Parameter	Frequency of assessment	Annual total	Unit
Potable water use	Annually		Cubic metres
Energy used (including for leachate treatment)	Annually		MWh of electricity
Non potable water use	Annually		Cubic metres

**Table S5.4 Reporting Forms**

Media/parameter	Reporting Format	Date of Form
Leachate	Form Leachate 1 or other reporting format to be agreed in writing with the Agency	
Air	Form Air 1 or other reporting format to be agreed in writing with the Agency	
Controlled water	Form Water 1 or other reporting format to be agreed in writing with the Agency	
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Agency	
Sewer	Form Sewer 1 or other reporting format to be agreed in writing with the Agency	
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Agency	
Particulate matter	Form Particulate 1 or other reporting format to be agreed in writing with the Agency	
Waste Return	Waste Return Form RATS2E	
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Agency	

## Schedule 6 - Notification

This page outlines 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 PPC Regulations.

### Part A

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

#### **(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution**

<b>To be notified within 24 hours of detection</b>	
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**

<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
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	

#### **Time periods for notification following detection of a breach of a limit**



Parameter	Notification period

<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 supplied as soon as practicable

<b>Any more accurate information on the matters for notification under Part A.</b>	
<b>Measures taken, or intended to be taken, to prevent a recurrence of the incident</b>	
<b>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</b>	
<b>The dates of any unauthorised emissions from the installation in the preceding 24 months.</b>	

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

\* authorised to sign on behalf of Corus (UK) Limited

## Schedule 7 - Interpretation

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

*“Annually”* means once every Year.

*“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 4 to the PPC Regulations

*“Authorised Officer”* means any person authorised by the 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.

*“Background concentration”* means such concentration of that substance as is present in:

- For emissions to surface water, the surface water quality up-gradient of the site; or
- For emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge; or
- For emissions of landfill gas, the ground or air outside the site and not attributable to the site.

*“Construction Proposals”* means written information, at a level of detail appropriate to the complexity and pollution risk, on the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the New Cell or Landfill Infrastructure.

*“CQA Validation Report”* means the final “as built” construction and engineering details of the New Cell or of the Landfill Infrastructure. It must provide a comprehensive record of the construction and must include, where relevant:

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- “As-built” plans and sections of the works;
- Copies of the site engineer’s daily records;
- Records of any problems or non-compliances and the solution applied;
- Any other site specific information considered relevant to proving the integrity of the New Cell or Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the Construction Proposals.

*“Fugitive emission”* means an emission to air, water or land from the activities which is not controlled by an emission or background concentration limit.

*“Groundwater Regulations”* means the Groundwater Regulations SI 1998 No. 2746, and words and expressions used in this permit which are also used in the Regulations shall have the same meanings as in those Regulations.

*“Landfill Infrastructure”* means any specified element of the:

- permanent capping;
- temporary capping (i.e. engineered temporary caps not cover materials);
- leachate abstraction systems;
- leachate transfer, treatment and storage systems;
- surface water drainage systems;
- leachate monitoring wells;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;
- landfill gas management systems;

within the site.

*“Landfill Regulations”* means the Landfill (England and Wales) Regulations SI 2002 No. 1559, and words and expressions used in this permit which are also used in the Regulations shall have the same meanings as in those Regulations.

*“Land Protection Guidance”* means Agency guidance “H7 - Guidance on the protection of land under the PPC Regime: Application site report and site protection monitoring programme”.

*“Liquids”* means any liquid other than leachate within the engineered landfill containment system.

*“LFTGN 05”* means Environment Agency Guidance for monitoring enclosed landfill gas flares, September 2004.

*“LFTGN 08”* means Environment Agency Guidance for monitoring landfill gas engines, September 2004.

*“New Cell”* means any new cell, part of a cell or other similar new area of the site where waste deposit is to commence after issue of this permit and can comprise:

- groundwater under-drainage system;
- permanent geophysical leak location system;
- leak detection layer;
- sub-grade;
- barriers;

- liners;
- leachate collection system;
- leachate abstraction system;
- separation bund/layer;
- cell or area surface water drainage system;
- side wall subgrade and containment systems;

for the New Cell.

"*No impact*" means that the change made to the construction process will not affect the agreed design criteria, specification or performance in a way that has a negative effect.

"notify without delay" and "notified without delay" means that a telephone call can be used, whereas all other reports and notifications must be supplied in writing, either electronically or on paper.

"*PPC Regulations*" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

"*Relevant person*" and "*relevant conviction*" shall have the meanings given to them in the Environmental Protection Act 1990

"*Review of the Hydrogeological Risk Assessment*" means a written review of the hydrogeological risk assessment included in the Application, together with any other parts of the Application that addressed the requirements of the Groundwater Regulations. The review shall assess whether the activities of disposal or tipping for the purpose of disposal of waste authorised by the permit continue to meet the requirements of the Groundwater Regulations

"*Site Protection and Monitoring Programme*" means a document which meets the requirements for Site Protection and Monitoring Programmes described in the Land Protection Guidance.

"*Technically competent management*" and "*technical competence*" shall have the meanings given to them in the Environmental Protection Act 1990.

"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, List of Wastes (Northern Ireland) Regulations 2005 (as amended), or The Special Waste Amendment (Scotland) Regulations 2004 as appropriate, and in relation to hazardous waste, includes the asterisk

"*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 the standards included in Environment Agency Guidance for Monitoring Enclosed Landfill Gas Flares LFTGN 05 or Guidance for Monitoring Landfill Gas Engine Emissions LFTGN 08.

END OF PERMIT