

Notice of variation and consolidation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Henry Streeter (Sand and Ballast)
Limited

Sipson Lane Combined Inert Landfill
Sipson Lane
Off Sipson Road
Sipson
West Drayton
UB7 0JG

Variation and consolidation application
number

EPR/BT7183IA/V004

Consolidated permit number

EPR/BT7183IA

Sipson Lane Combined Inert Landfill

Consolidated permit number EPR/BT7183IA

Introductory note

This introductory note does not form a part of the notice.

The following notice gives notice of the variation of environmental permits BT7183IA (Sipson North East Inert Landfill) and TP3597NJ (South of Sipson Lane II) referred to in the status logs below and the replacement of those permits with a consolidated environmental permit.

This variation consolidates the permit for Sipson North East Inert Landfill and the permit South of Sipson Lane II into a single new permit.

The Schedules specify the changes made to the original permits.

Schedule 1 of this notice lists any changes to the original permits. Schedule 2 of this notice contains the varied and consolidated environmental permit, including any site plan.

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

Status Log of permit A: BT7183IA		
Detail	Date	Response date
Permit application BT7183IA	Received 20/11/2002	
Permit BT7183IA Issued	04/06/2004	
Permit BT7183IA Varied	09/02/2007	
Variation application EPR/BT7183IA/V003 Duly Made	08/04/2010	
Variation application EPR/BT7183IA Issued	28/03/2011	
Variation application EPR/BT7183IA/V004 Duly Made	08/04/2010	
Variation determined EPR/BT7183IA (varied and consolidated permit issued)	29/03/2011	

Status Log of permit B: TP3597NJ

Detail	Date	Response date
Permit Application EAWML 80531 Received	10/08/2000	
Permit EAWML 80531 Issued	24/12/2001	
Application EPR/TP3597NJ/V002	Duly made 08/04/2010	
Variation determined EPR/TP3597NJ	28/03/2011	
Variation Application EPR/TP3597NJ/V003	Duly made 08/04/2010	
Variation determined EPR/BT7183IA (varied and consolidated permit issued)	29/03/2011	

End of Introductory note

Notice of variation and consolidation

Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/BT7183IA

The Environment Agency in exercise of its powers under regulations 18 and 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates the environmental permits issued to

Henry Streeter (Sand and Ballast) Limited ("the operator")

whose registered office is

14-16 Station Road West

Oxted

Surrey

RH8 9EP

company registration number 543481

to operate a regulated facility at

Sipson Lane Combined Inert Landfill

Sipson Lane

Off Sipson Road

Sipson

West Drayton

Middlesex UB7 0JG

to the extent set out in the schedules.

The notice shall take effect from 29/03/2011

Name	Date
Jane McNamara	29/03/2011

Authorised on behalf of the Environment Agency

Schedule 1**Permit A:**

All conditions have been replaced by the consolidated permit ERP/BT7183IA as a result of the application made by the operator.

Permit B:

All conditions have been replaced by the consolidated permit ERP/BT7183IA as a result of the application made by the operator.

Schedule 2 – varied and consolidated permit

Please see attached.

Schedule 2

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 Finance

- 1.2.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Environment Agency dated 29/03/2011 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 Environment Agency.
- 1.2.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:
- (a) the costs of setting up and operating the landfill;
 - (b) the costs of the financial provision required by condition 1.2.1; and
 - (c) the estimated costs for the closure and aftercare of the landfill.

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.

2.4 Landfill Engineering

- 2.4.1 (a) No construction of any new cell shall commence until the operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- (b) ~~The operator shall review the construction proposals every 12 months~~
- 2.4.2 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 Environment Agency.
- 2.4.3 The operator shall submit a CQA Validation Report to the Environment Agency as soon as practicable following the construction of the new cell.
- 2.4.4 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 Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.4.5 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 Environment Agency.
- 2.4.6 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the landfill infrastructure.

- 2.4.7 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.4.4 and 2.4.5 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.4.8 For the purposes of conditions 2.4.1, 2.4.3 and 2.4.4, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four 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.
- 2.4.9 Where the Environment Agency has required further information under condition 2.4.8(a), the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
- (a) confirmed whether or not it is satisfied; or
 - (b) informed the operator that it requires further information.

2.5 Waste acceptance

- 2.5.1 Wastes shall only be accepted for disposal if:
- (a) they are listed in schedule 2, and
 - (b) they are inert waste, and
 - (c) they are not liquid waste (including waste waters but excluding sludge), and
 - (d) all the relevant waste acceptance procedures have been completed, and
 - (e) they fulfil the relevant waste acceptance criteria, and
 - (f) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
 - (g) they are wastes which have been treated, except for wastes for which treatment is not technically feasible.
- 2.5.2 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; and
 - (b) waste at the point of deposit;
- and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.
- 2.5.3 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.
- 2.5.4 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.5.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawings PA-1107-13D , PA-1205-16E and SLC/SIPNEEXT/12.

- 2.5.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.3.
- 2.5.7 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 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.

2.6 Closure and aftercare

- 2.6.1 The operator shall maintain a closure and aftercare management plan.

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.
- 3.1.2 There shall be no emission from the activities into groundwater of any hazardous substances contrary to the EP Regulations.
- 3.1.3 There shall be no emission from the activities into groundwater of any non-hazardous pollutants so as to cause pollution.
- 3.1.4 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in schedule 3 table S3.1 shall not be exceeded.
- 3.1.5 The limits for landfill gas arising from the facility set out in schedule 3, tables S3.3 shall not be exceeded.
- 3.1.6 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
- (a) between nine and six months prior to the sixth anniversary of the granting of the permit, and
 - (b) between nine and six months prior to every subsequent six years after the sixth anniversary of the granting of the permit.

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.

3.3 Noise and vibration

- 3.3.1 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.
- 3.3.2 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.

3.4 Monitoring

- 3.4.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions for the parameters specified in the following tables in schedule 3 to this permit:
 - (a) Groundwater specified in table S3.1 and 3.2;
 - (b) Landfill gas specified in table S3.3 and S3.4;
- 3.4.2 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.
- 3.4.3 A topographical survey of the site referenced to Ordnance Datum shall be carried out:
 - (a) annually, or prior to the disposal of waste in any new cell or new development area of the landfill whichever is the shorter period, and
 - (b) 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.

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) the results of groundwater monitoring;
 - (ii) landfill gas monitoring;
 - (iii) waste types and quantities;
 - (iv) the specification and as built drawings of the basal and sidewall engineering systems

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 or reports 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(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) the topographical surveys required by condition 3.4.3 other than those submitted as part of a CQA validation report;
- (c) 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;
- (d) 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;
- (e) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;

- 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 Within one 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.
- 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.
- In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

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.

4.4 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	
Description of activities	Limits of activities
D1: Deposit into or on to land	The deposit of inert waste into or onto land.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Site Operating Plan	All Parts and associated documents	26/03/2010

Table S1.3 Annual waste input limits	
Category	Limit Tonnes/ Year
Inert Waste	250,000

Schedule 2 - List of permitted wastes

Table S2.3 Permitted waste types and quantities

Maximum quantity	1,869,000 tonnes
Waste code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	Wastes from mineral extraction
01 01 02	Wastes from mineral non-metalliferous excavation
01 04	Wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	Waste sand and clays
01 04 12	Tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 05	Drilling muds and other drilling wastes
01 05 04	Firewater drilling muds and wastes
10	WASTES FROM THERMAL PROCESSES
10 11	Wastes from manufacture of glass and glass products
10 11 03	Waste glass-based fibrous materials
10 12	Wastes from manufacture of ceramic goods, brick, tiles and construction products
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)
15	WASTE PACKAGING; ABSORBENT, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	Packaging (including separately collected municipal packaging waste)
15 01 07	Glass packaging
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 01	End-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 20	Glass
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	Concrete, bricks tiles and ceramics
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	Wood, glass and plastic
17 02 02	Glass
17 05	Soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	Soil and stones
17 05 06	Dredging spoil other than those mentioned in 17 05 05
17 05 08	Track ballast other than those mentioned in 17 05 07
17 09	Other construction and demolition wastes
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02, 17 09 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified

Table S2.3 Permitted waste types and quantities

Maximum quantity	1,869,000 tonnes
Waste code	Description
19 12 05	Glass
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	Separately collected fractions (except 15 01)
20 01 02	Glass
20 02	Garden and park wastes (including cemetery waste)
20 02 02	Soil and stones

Schedule 3 – Emissions and monitoring

Table S3.1 Trigger levels for emissions into groundwater and monitoring requirements

Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
WG40	Ammoniacal Nitrogen	5.0 mg/l	Spot Sample	Quarterly	Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water TGN02
WG40	Total Organic Carbon	25 mg/l	Spot Sample	Quarterly	As above
WG45	Ammoniacal Nitrogen	5.0 mg/l	Spot Sample	Quarterly	As above
WG45	Total Organic Carbon	25 mg/l	Spot Sample	Quarterly	As above
WG47	Ammoniacal Nitrogen	5.0 mg/l	Spot Sample	Quarterly	As above
WG47	Total Organic Carbon	25 mg/l	Spot Sample	Quarterly	As above
BH15	Ammoniacal Nitrogen	2.5 mg/l	Spot Sample	Quarterly	As above
BH15	Total Organic Carbon	25 mg/l	Spot Sample	Quarterly	As above
BH15	Chloride	400 mg/l	Spot Sample	Quarterly	As above
BH16	Ammoniacal Nitrogen	2.5 mg/l	Spot Sample	Quarterly	As above
BH16	Total Organic Carbon	25 mg/l	Spot Sample	Quarterly	As above
BH16	Chloride	400 mg/l	Spot Sample	Quarterly	As above
BH19	Ammoniacal Nitrogen	0.8 mg/l	Spot Sample	Quarterly	As above
BH19	Total Organic Carbon	15 mg/l	Spot Sample	Quarterly	As above
BH19	Chloride	250 mg/l	Spot Sample	Quarterly	As above
BH20	Ammoniacal Nitrogen	0.8 mg/l	Spot Sample	Quarterly	As above
BH20	Total Organic Carbon	15 mg/l	Spot Sample	Quarterly	As above
BH20	Chloride	250 mg/l	Spot Sample	Quarterly	As above
BH21	Ammoniacal Nitrogen	0.8 mg/l	Spot Sample	Quarterly	As above
BH21	Total Organic Carbon	15 mg/l	Spot Sample	Quarterly	As above
BH21	Chloride	250 mg/l	Spot Sample	Quarterly	As above
BH22	Ammoniacal Nitrogen	0.8 mg/l	Spot Sample	Quarterly	As above
BH22	Total Organic Carbon	15 mg/l	Spot Sample	Quarterly	As above
BH22	Chloride	250 mg/l	Spot Sample	Quarterly	As above
BH23	Ammoniacal Nitrogen	0.8 mg/l	Spot Sample	Quarterly	As above
BH23	Total Organic Carbon	15 mg/l	Spot Sample	Quarterly	As above
BH23	Chloride	250 mg/l	Spot Sample	Quarterly	As above
BH24	Ammoniacal Nitrogen	0.8 mg/l	Spot Sample	Quarterly	As above
BH24	Total Organic Carbon	15 mg/l	Spot Sample	Quarterly	As above
BH24	Chloride	250 mg/l	Spot Sample	Quarterly	As above
BH25	Ammoniacal Nitrogen	0.8 mg/l	Spot Sample	Quarterly	As above
BH25	Total Organic Carbon	15 mg/l	Spot Sample	Quarterly	As above
BH25	Chloride	250 mg/l	Spot Sample	Quarterly	As above
BH26	Ammoniacal Nitrogen	5 mg/l	Spot Sample	Quarterly	As above
BH26	Total Organic Carbon	30 mg/l	Spot Sample	Quarterly	As above
BH26	Chloride	250 mg/l	Spot Sample	Quarterly	As above

Table S3.2 Groundwater – other monitoring requirements

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
G11, WG37, WG38, WG40, WG41, WG45, WG47, G44, G46, BH05, BH06, BH13, BH14, BH15, BH16, BH18, BH19, BH20, BH21, BH22, BH23, BH24, BH25, BH26, BH27, BH28	Water level,	Monthly	Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water TGN02	
G11, WG37, WG38, WG40, WG41, WG45, WG47, G44, G46, BH05, BH06, BH13, BH14, BH15, BH16, BH18, BH19, BH20, BH21, BH22, BH23, BH24, BH25, BH26, BH27, BH28	Water level, pH Conductivity Ammoniacal Nitrogen Chloride Sulphate Alkalinity as CaCO3 TON (Total Oxidised Nitrogen) as N TOC Potassium Sodium Calcium Magnesium	Quarterly	As above	
G11, WG37, WG38, WG40, WG41, WG45, WG47, G44, G46, BH05, BH06, BH13, BH14, BH15, BH16, BH18, BH19, BH20, BH21, BH22, BH23, BH24, BH25, BH26, BH27, BH28	Iron Manganese Cadmium Chromium Copper Lead Nickel Zinc	Annually	As-above	

Table S3.3 Landfill gas in external monitoring boreholes – limits and monitoring requirements				
Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
WG37 – WG43	Methane Carbon Dioxide Oxygen Atmospheric pressure Differential Pressure Meteorological data	1 %v/v 9 %v/v [no limit] [no limit] [no limit] [no limit]	Monthly	Guidance on the management of landfill gas (LFTGN03)
G44, WG45, G46, WG47	Methane Carbon Dioxide Oxygen Atmospheric pressure Differential Pressure Meteorological data	1 %v/v 8.3 %v/v [no limit] [no limit] [no limit] [no limit]	Monthly	Guidance on the management of landfill gas (LFTGN03)
BH06, BH05	Methane Carbon Dioxide Oxygen Atmospheric pressure Differential Pressure Meteorological data	1 %v/v 5 %v/v [no limit] [no limit] [no limit] [no limit]	Monthly	Guidance on the management of landfill gas (LFTGN03)
BH13, BH14	Methane Carbon Dioxide Oxygen Atmospheric pressure Differential Pressure Meteorological data	1 %v/v 6 %v/v [no limit] [no limit] [no limit] [no limit]	Monthly	Guidance on the management of landfill gas (LFTGN03)
BH15, BH17	Methane Carbon Dioxide Oxygen Atmospheric pressure Differential Pressure Meteorological data	1 %v/v 6.5 %v/v [no limit] [no limit] [no limit] [no limit]	Monthly	Guidance on the management of landfill gas (LFTGN03)
BH16	Methane Carbon Dioxide Oxygen Atmospheric pressure Differential Pressure Meteorological data	1 %v/v 7 %v/v [no limit] [no limit] [no limit] [no limit]	Monthly	Guidance on the management of landfill gas (LFTGN03)
BH18 – BH28	Methane Carbon Dioxide Oxygen Atmospheric pressure Differential Pressure Meteorological data	1 %v/v 7 %v/v [no limit] [no limit] [no limit] [no limit]	Monthly	Guidance on the management of landfill gas (LFTGN03)

Table S3.4 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 monitoring boreholes INW01, INW02, INW03, INW04, INW05, INW06, INW07, INW08, INW09, INW10, INW11, INW12	Methane Carbon Dioxide Oxygen Differential Pressure Gas flow Rate Barometric Pressure Liquid Level	Monthly	Guidance on the management of landfill gas (LFTGN03)	

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
Water Level pH Conductivity Ammoniacal Nitrogen Chloride Sulphate Alkalinity as CaCO ₃ TON (Total Oxidised Nitrogen) as N TOC Potassium Sodium Calcium Magnesium	G11, WG37, WG38, WG40, WG41, WG45, WG47, G44, G46, BH05, BH06, BH13, BH14, BH15, BH16, BH18, BH19, BH20, BH21, BH22, BH23, BH24, BH25, BH26, BH27, BH28	Quarterly	
Iron Manganese Cadmium Chromium Copper Lead Nickel Zinc	G11, WG37, WG38, WG40, WG41, WG45, WG47, G44, G46, BH05, BH06, BH13, BH14, BH15, BH16, BH18, BH19, BH20, BH21, BH22, BH23, BH24, BH25, BH26, BH27, BH28	Annually	
Methane Carbon Dioxide Oxygen Differential Pressure Barometric Pressure Flow Rate	WG37-43, G44, WG45, G46, WG47, In waste monitoring boreholes INW01, INW02, INW03, INW04, BH5, BH6, BH13 – BH28, In waste monitoring boreholes INW05, INW06, INW07, INW08, INW09, INW10, INW11, INW12	Quarterly	

Table S4.2 Reporting forms		
Media/parameter	Reporting Format	Date of Form
Groundwater	Form groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	DD/MM/YY
Landfill gas	Form Gas 1 or other reporting format to be agreed in writing with the Environment Agency	DD/MM/YY
Waste Return	Waste Return Form RATS2E	DD/MM/YY
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	DD/MM/YY

Schedule 5 - 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 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	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
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

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.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of *Henry Streeter (Sand and Ballast) Ltd.*

Schedule 6 - 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 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.

"Construction Proposals";

- for new cells, means written information at a level of detail appropriate to the complexity and pollution risk, on stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the new cell.
- for landfill infrastructure, means the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the 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-compliance 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.

"emissions to land" includes emissions to groundwater.

"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.

"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 or background concentration limit..

"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.

"Landfill Infrastructure" means any specified element of the:

- surface water drainage systems;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;

within the Site.

"Liquids" means any liquid other than leachate within the landfill.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"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;
- sub-grade;
- artificially established geological barriers;
- 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 alter the agreed design criteria, specification or performance in a way that has a negative effect.

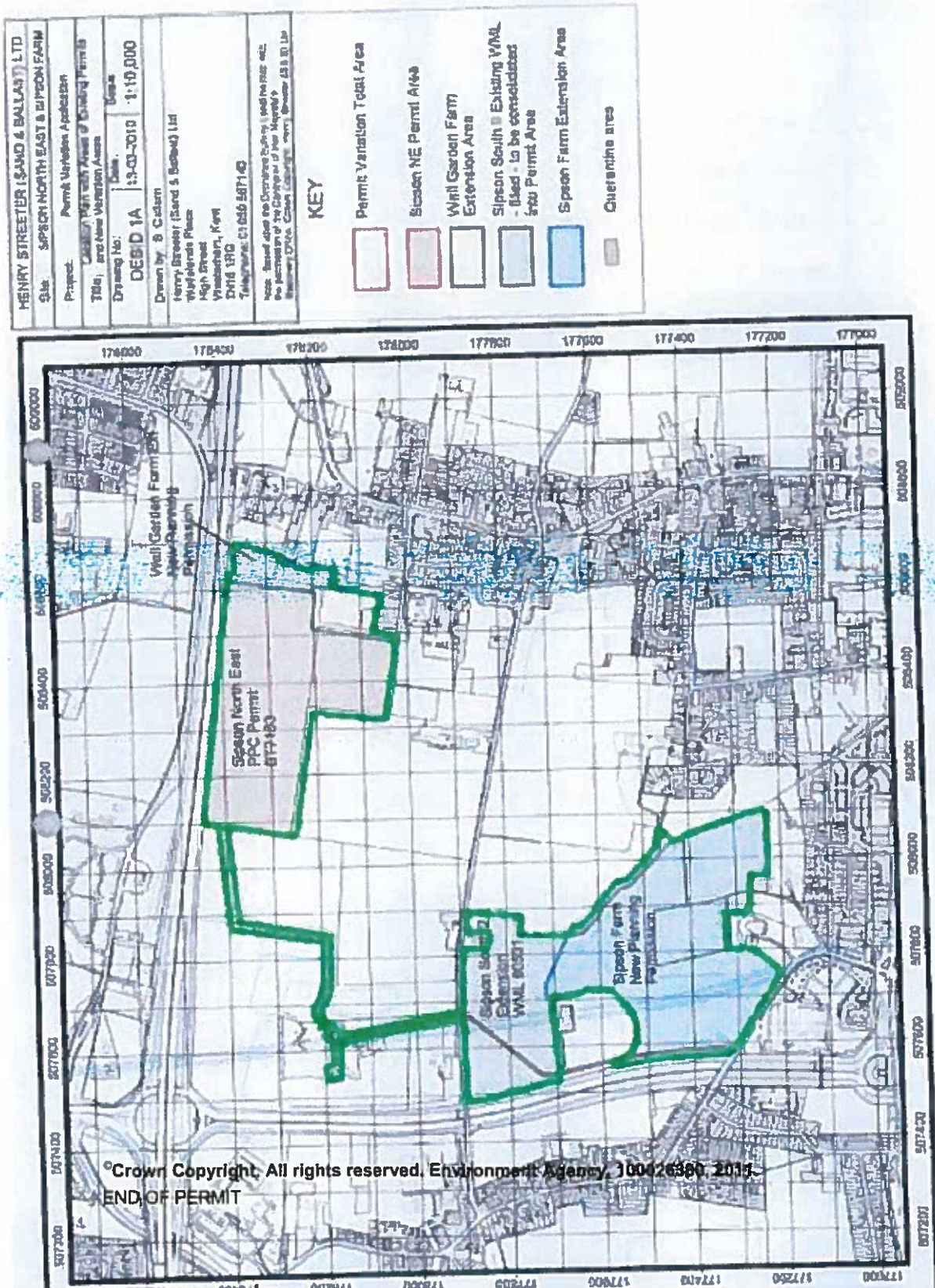
"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"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.

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 the limit.

"year" means calendar year ending 31 December.

Schedule 7 - Site plan



Permit Number: AB1234CD Operator: [Operator name]

Facility: [Facility name] Form Number: Groundwater1 / DD/MM/YY

Reporting of groundwater monitoring for the period from DD/MM/YYYY to DD/MM/YYYY

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]

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)

Permit Number: AB1234CDOperator: [Operator name]

Facility: [Facility name]Form Number: LFG1 / DD/MM/YY

Reporting of landfill gas monitoring for the period from DD/MM/YYYY to DD/MM/YYYY

Monitoring Point	Substance / Parameter	Compliance limit	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]

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.

SignedDate.....

(Authorised to sign as representative of Operator)