

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Ballast Phoenix Limited
Sandy Lane IBA Facility
Sandy Lane Quarry and Landfill
Bromsgrove
Worcestershire
B61 0QT

Permit number
EPR/XP3030VM

Sandy Lane IBA Facility

Permit number EPR/XP3030VM

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows:

The facility is located west of an operational landfill site and adjacent to a sand quarry, at grid reference SO 95047 76299. The site is bordered to the south by the A491 that forms part of the strategic highway network, and is also approximately within 2 km west of the M5 (junction 4) and links to the A456 trunk road.

The permit implements primarily the relevant requirements of the EU Directives on Industrial Emissions and Waste.

The IBA processing facility will comprise:

- Receipt and acceptance of unprocessed incinerator bottom ash (IBA) on an area with an impermeable surface and sealed drainage;
- Storage of IBA on an impermeable surface for a period of time for conditioning prior to further processing;
- Storage of surface water run-off in a lagoon;
- Processing of conditioned IBA in an enclosed building comprising vibrating screens and magnetic separation to remove the ferrous and non-ferrous metals and grading the product into different sizes; and
- Storage of processed IBA and metals on an impermeable surface prior to despatch off-site for recovery.

The Sandy Lane IBA facility will accept up to 120,000 tonnes of IBA per annum from off-site incinerators burning waste and processed to produce incinerator bottom ash aggregate (IBAA). IBAA is processed IBA utilising bottom ash from the thermal treatment of municipal solid waste, commercial and industrial wastes, and is generally accepted as a replacement for the majority of primary aggregates by both UK and European standards.

The IBA will be transferred from the site of production to the IBA facility in covered vehicles. IBA is quenched before being transported, which means that it is carried in a moist condition preventing dust emissions during transportation. During the handling process, the IBA remains in a moist condition.

The IBA will be processed within an enclosed building in accordance with the operator's Environmental Management System and operation control procedures. This includes the inspection of the material prior to processing and ensures the material is suitable for mechanical treatment. An Environmental Management System (EMS) will be in place prior to the commencement of site commissioning.

Point source emissions to air will be from the diesel generator and fuel tank vents. Point source discharges from the Installation to surface water, groundwater and sewer are not permitted. Rainwater from building roof will be collected in a storage tank for dust suppression. Excess rainwater and surface water run-off from within the IBA facility is collected in a lagoon for dust suppression and use in conditioning of the IBA stockpiles. During periods of high rainfall and before the lagoon reaches full capacity the water will be collected and removed off-site by tankers for disposal at appropriate treatment facilities. Groundwater risk assessment shows that the impact to groundwater will be insignificant. A groundwater and lagoon monitoring plan will be in place during the operational life of the facility.

Site surfaces will meet an appropriate standard taking into account the proposed plant and equipment to be used. All liquid tanks, whose emissions to water or land could cause pollution, will be contained in adequate bunding constructed in line with industry best practice standards and sized to contain 110% of the contents of the largest tank or 25% of the total tankage within a bund, whichever is the greater.

There are no internationally designated ecological sites within the relevant distance criteria of the Installation. There are four Sites of Special Scientific Interest and ten Local Wildlife Sites with 2 km of the Installation. Assessment reviewed by the Environment Agency shows that emissions from the Installation are unlikely to have an adverse impact on interest features of the ecological sites.

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

Status log of the permit		
Description	Date	Comments
Application EPR/XP3030VM/A001	Duly made 07/04/14	Application for an incinerator bottom ash (IBA) treatment facility.
Additional information received	07/07/14	Response to Schedule 5 notice #1 dated 09/06/14.
Additional information received	24/07/14	Lagoon capacity calculations.
Additional information received	28/11/14	Response to Schedule 5 notice #2 dated 05/08/14.
Additional information received	29/01/15	Additional information detailing groundwater technical issues and thermal input of site generator.
Additional information received	21/05/15	Response to Schedule 5 notice #3 dated 04/03/15.
Additional information received	04/08/15	Ecology survey report.
Additional information received	18/08/15	Revised site plan.
Permit determined	DD/MM/YY	Permit issued to Ballast Phoenix Limited.

Other Part A installation permits relating to this installation		
Operator	Permit number	Date of issue
Sandy Lane Landfill	EPR/VP3036GQ	14/10/05

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/XP3030VM

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

Ballast Phoenix Limited ("the operator"),

whose registered office is

1 Victoria Stables

Essex Way

Bourne

Lincolnshire

PE10 9JZ

company registration number 03290431

to operate an installation at

Sandy Lane IBA Facility

Sandy Lane Quarry and Landfill

Bromsgrove

Worcestershire

B61 0QT

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

Name	Date

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 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 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").
- 2.1.2 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

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 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.
- 2.3.2 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 or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, 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.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.2; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 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.
- 2.3.6 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.
- 2.3.7 No construction of any part of the site lagoon, surfacing, bunding and groundwater monitoring infrastructure shall commence until the operator has submitted relevant construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.3.8 The construction of the site lagoon, surfacing, bunding and groundwater monitoring infrastructure shall take place only in accordance with the approved construction proposals unless a change has otherwise been agreed in writing by the Environment Agency.

- 2.3.9 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the site lagoon, surfacing, bunding and groundwater monitoring infrastructure.
- 2.3.10 For the purposes of conditions 2.3.7 and 2.3.8, 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, either:
- (a) confirmed whether or not it is satisfied; or
 - (b) informed the operator that it requires further information.

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 Pre-operational conditions

- 2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 have been completed.

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 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

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 which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (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 Odour

3.3.1 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.

3.3.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

3.4.1 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.

3.4.2 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 which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

3.5.1 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) groundwater monitoring specified in tables S3.3 and S3.4;
- (b) ambient monitoring specified in table S3.5;
- (c) process monitoring specified in table S3.6

3.5.2 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.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.5.4 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, S3.4, S3.5 and S3.6 unless otherwise agreed in writing by the Environment Agency.

3.6 Pests

3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. 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.

3.6.2 The operator shall:

- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
- (b) implement the pests 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 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 the permit including an interpretive review of that data;
- (b) the annual production/treatment data set out in schedule 4 table S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

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 S4.4; 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 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, 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:

- (c) the death of any of the named operators (where the operator consists of more than one named individual);
- (d) any change in the operator's name(s) or address(es); and
- (e) 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.

4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

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 "immediately", 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	S5.4 A(1) (b) (iii) Recovery or a mix of recovery and disposal of non hazardous waste with a capacity exceeding 75 tonnes per day involving treatment of slags and ashes.	R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	From receipt of permitted waste to treatment and despatch off-site for recovery. Treatment of incinerator bottom ash consisting of crushing, separation and screening shall be carried out in an enclosed building and on an impermeable surface with sealed drainage. Waste types suitable for acceptance are limited to those specified in Table S2.2.
Directly Associated Activity			
A2	Storage of waste pending recovery	R13: Storage of waste pending the operations numbered R4 and R5 (excluding temporary storage, pending collection, on the site where it is produced).	Undertaken in relation to Activity A1. Storage of incinerator bottom ash on an impermeable surface with sealed drainage system prior to treatment in enclosed building. Storage of ferrous/non-ferrous metals from treatment of incinerator bottom ash. Waste types suitable for acceptance are limited to those specified in Table S2.2.
A3	Storage of processed materials	Storage of separated ferrous metals, non-ferrous metals and processed incinerator bottom ash.	Undertaken in relation to Activity A1. Storage of processed metals (ferrous and non-ferrous) and incinerator bottom ash on an impermeable surface with sealed drainage system.

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
A4	Electrical power supply	Combustion of fuel (diesel) in one generator with a thermal input of 0.97 MW.	Undertaken in relation to Activity A1. From the receipt of diesel to combustion with the release of combustion gases.
A5	Raw material storage	Storage of raw materials including lubrication oil and diesel.	Undertaken in relation to Activity A1. From the receipt of raw materials to despatch for use within the facility.
A6	Process water storage	Storage of surface water run-off in one site storage lagoon	Undertaken in relation to Activity A1. From the receipt of surface water run-off arising from IBA storage to despatch for re-use on IBA storage piles or despatch off-site by tankers.
A7	Surface water collection and storage	Collection and storage of uncontaminated roof water in one storage tank	Undertaken in relation to Activity A1. From the receipt of roof water to despatch for re-use on storage areas or transfer to on site storage lagoon.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/XP3030VM/A001	Information provided in response to section 3a – technical standards, Part B3 of the application form: <ul style="list-style-type: none"> • How to comply with your Environmental Permit • Internal Documentation Quality Protocol • ESA sampling and testing <u>Other documents:</u> <ul style="list-style-type: none"> • Non Technical Summary – Sandy Lane • Wastes accepted on site • P006 Dust Management Plan • Fugitive Emissions Management Plan and Risk Assessment • Environmental Risk Assessment – Sandy Lane 	07/04/14
Response to Schedule 5 Notice #1 dated 09/06/14	Response to questions detailing: <ul style="list-style-type: none"> • Waste acceptance procedures; 	07/07/14

Table S1.2 Operating techniques		
Description	Parts	Date Received
	<ul style="list-style-type: none"> • Purpose of site generator; • Purpose of diesel storage tank and proposed bunding; • Storage of IBAA, ferrous and non-ferrous metal output; • Emissions management in enclosed building; • Particulate (dust) monitoring protocol 	
Additional information	Lagoon capacity calculations.	24/07/14
Response to Schedule 5 Notice #2 dated 05/08/14	Response to questions detailing: <ul style="list-style-type: none"> • SGN IPPC S5.06 and BAT compliance; • Accident management plan; • Site plan showing location of spill kits and fire extinguishers; • Lagoon and hardstanding containment design; • Destination of IBA process water tankered off-site; • Lagoon monitoring plan; • Number of oil storage tanks; • Frequency of particulate (dust) monitoring and monitoring locations; • Groundwater monitoring plan; • Groundwater risk assessment 	28/11/14
Additional information	Further information regarding the groundwater monitoring plan and thermal input of proposed site generator.	29/01/15
Response to Schedule 5 Notice #3 dated 04/03/15	Revised BAT assessment.	21/05/15

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The operator shall submit a written report to the Environment Agency on the implementation of its Environmental Management System (EMS) and the progress made in the accreditation of the system by an external body or if appropriate submit a schedule by which the EMS will be subject to accreditation.	12 months following the commencement of site operations.
IC2	<p>The operator shall undertake a detailed revised assessment of noise and vibration from site activities to verify the assumptions made in the Application. The assessment shall be conducted in accordance with the specified procedures in BS4142:2014.</p> <p>The results of the assessment together with conclusions and recommendations shall be submitted to the Environment Agency for approval in writing.</p>	Within 12 months of the completion of commissioning.
IC3	<p>Following the completion of IC2 and if the assessment undertaken indicates the installation might give rise to pollution, the operator shall submit to the Environment Agency, a report detailing proposals and timescales for the implementation of appropriate noise mitigation measures to ensure that site noise levels do not give rise to pollution.</p> <p>The proposals for noise mitigation shall be in accordance with the requirements of the Environment Agency's Technical Guidance Note IPPC H3 (Part 2) – Noise Assessment and Control. The proposals shall be implemented by the operator from the date of approval in writing by the Environment Agency subject to any such amendments or additions as notified by the Environment Agency.</p>	One month following the completion of IC2.

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC4	<p>The operator shall submit a post-commissioning report to the Environment Agency which shall include, but not be limited to:</p> <ul style="list-style-type: none"> • a review of the environmental performance of the facility against the design parameters set out in the Application; • a review of the performance of the facility against the conditions of this permit and the pre-commissioning report proposals; and • details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions 	Within 4 months of the completion of commissioning.
IC5	<p>The operator shall submit a written plan to the Environment Agency for approval. The plan must contain the requirements to:</p> <ul style="list-style-type: none"> • install perimeter security fencing around the storage and treatment areas at the installation; • review the need for additional security measures on site such as closed circuit television etc.; and • any other measures to comply with the requirements of EPR 1.00 – How to comply with your environmental permit and IPPC S5.06, including construction standards and maintenance measures. <p>The plan must contain dates for the implementation of individual measures and improvements.</p> <p>The plan shall be implemented by the operator from the date of approval in writing by the Environment Agency subject to any such amendments or additions as notified by the Environment Agency.</p>	6 months following the commencement of site operations.
IC6	<p>The operator shall submit a written report to the Environment Agency for approval. The report shall contain a review of the results of the particulate monitoring specified in the permit and the effectiveness of the site's particulate monitoring strategy. The report shall include further measures to be undertaken to reduce particulate emissions at the facility (if necessary) and dates for implementation.</p> <p>The actions and outcomes of the report shall be implemented by the operator from the date of approval in writing by the Environment Agency subject to any such amendments or additions as notified by the Environment Agency.</p>	12 months following the commencement of site operations.

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
POC 1	<p>At least six months (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall submit a commissioning plan to the Environment Agency along with timescales for implementation. The plan shall be designed to demonstrate that permit conditions will be met under all anticipated operating conditions (including during adverse weather), and shall confirm the commissioning programme, detail plant monitoring protocols, assess the performance of all site infrastructure against design parameters and monitor any abnormal waste and emissions generated during commissioning.</p> <p>No site operations shall commence or waste shall be accepted at the facility until the Environment Agency has given written approval of the commissioning plan. The plan shall be implemented in accordance with the Environment Agency's written approval.</p>

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
POC 2	<p>At least six months (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall submit a written copy of the site Environmental Management System (EMS) and make available for inspection all documents and procedures which form part of the site EMS.</p> <p>The EMS shall cover all activities at the installation and shall be in accordance with the Environment Agency Guidance – How to comply with your Environmental Permit and section 2.3 in Sector Guidance Note IPPC S5.06 – Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste. The EMS shall include the techniques the operator relies upon to manage the operation, closure and decommissioning of the site. The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.</p> <p>No site operations shall commence or waste shall be accepted at the installation unless the Environment Agency has given prior written permission under this condition.</p>
POC 3	<p>At least six months (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall ensure that a review of the method of construction and integrity of the proposed secondary containment for the fuel storage tanks is carried out by a qualified engineer.</p> <p>The review shall compare the proposed secondary containment against the standards/requirements set out in the following Guidance documents:</p> <ul style="list-style-type: none"> • CIRIA C736 – Containment Systems for the Prevention of Pollution – secondary, tertiary and other measures for industrial and commercial premises; • Sector Guidance Note IPPC S5.06 – Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste; • How to Comply with your Environmental Permit; • The Control of Pollution (Oil Storage) (England) Regulations 2001; and/or • other relevant industry standard. <p>The review shall identify any measures necessary to meet those requirements and propose a timescale for implementing them. A written report of the review shall be submitted to the Environment Agency detailing the reviews findings and recommendations. Remedial action shall be taken to ensure the tanks meet the standards set out in the above documents and implement the maintenance and inspection regime. The report shall be implemented in accordance with the written approval from the Environment Agency.</p> <p>No site operations shall commence or waste shall be accepted at the installation unless the Environment Agency has given prior written permission under this condition.</p>
POC 4	<p>At least six months (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall ensure that a review of the integrity of the site surfacing is carried out by a qualified engineer.</p> <p>The review shall compare the integrity of the site surfacing against the requirements of Section 2.2.5 of the Sector Guidance Note IPPC S5.06 – <i>Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste</i> and the relevant British Construction Standard stated in the Application. The review shall identify any measures necessary to meet those requirements and propose a timescale for implementing them. A written report of the review shall be submitted to the Environment Agency detailing the reviews findings and recommendations.</p> <p>Remedial action shall be taken to ensure that the site surfacing meets the standards set out in the Application and implement the maintenance and inspection regime. The report shall be implemented in accordance with the written approval from the Environment Agency.</p> <p>No site operations shall commence or waste shall be accepted at the installation</p>

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
	unless the Environment Agency has given prior written permission under this condition.
POC 5	<p>At least three months (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall submit the specification of the diesel generator proposed for the installation to verify the details provided in the Application.</p> <p>No site operations shall commence or waste shall be accepted at the installation unless the Environment Agency has given prior written permission under this condition.</p>
POC 6	<p>At least six months (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall submit a report on the baseline conditions of soil and groundwater at the installation. The report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities provided for in Article 22(3) of the Industrial Emissions Directive. The report shall contain information, supplementary to that already provided in Application Site Condition Report, needed to meet the information requirements of Article 22(2) of the Industrial Emissions Directive.</p>
POC 7	<p>At least four weeks (or any other date as agreed in writing with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall provide written evidence to the Environment Agency of the Technically Competent Manager (TCM) at the proposed installation. The report shall confirm that the person(s) hold the relevant qualifications under the Energy and Utilities Skill (ESA) scheme or other equivalent scheme for the operation of the incinerator bottom ash facility.</p> <p>No site operations shall commence or waste shall be accepted at the installation unless the Environment Agency has given prior written permission under this condition.</p>

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Fuel oil	Sulphur content not exceeding 0.1% by mass.

Table S2.2 Permitted waste types and quantities for treatment of incinerator bottom ash (Activity A1)	
Maximum quantity	Annual throughput shall not exceed 120,000 tonnes.
Waste code	Description
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 01	wastes from incineration or pyrolysis of waste
19 01 12	bottom ash and slag other than those mentioned in 19 01 11

Draft

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Diesel generator	No parameter set	No limit set	--	--	--
Vents	Fuel Storage tanks	No parameter set	No limit set	--	--	--

Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
Transfer of surface water run-off by tankers for despatch off-site	No parameter set	Lagoon	No limit set	--	--	--

Monitoring point reference	Parameter	Limit (including unit) [note 1]	Reference Period	Monitoring frequency	Monitoring standard or method
IBA 1, IBA 2, SAN 800 as referenced in Application groundwater monitoring plan	Mercury	0.01 µg/l	Spot Sample	Monthly during baseline monitoring period, then every 6 months once operational.	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J, version 2, April 2010) or
	pH	10 µg/l			
	Chloride	250 µg/l			
	Iron (dissolved)	200 µg/l			
	Antimony	5 µg/l			
	Lead	125 µg/l			
IBA 1, IBA 2, SAN 800 as referenced in Application groundwater monitoring plan	Alkalinity, Electrical Conductivity, COD, Ammoniacal-Nitrogen, Sulphates, Arsenic, Boron, Cadmium, Nickel, Zinc, Chromium, Copper	No limit set	Spot Sample	Monthly	

Table S3.3 Groundwater – emission limits and monitoring requirements					
Monitoring point reference	Parameter	Limit (including unit) [note 1]	Reference Period	Monitoring frequency	Monitoring standard or method
					such other subsequent guidance as may be agreed in writing with the Environment Agency.

Note 1 – Emission limits to be reviewed by the Environment Agency following completion of baseline groundwater monitoring survey.

Table S3.4 Groundwater – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
IBA 1 ¹ , IBA 2, SAN 800, SAN 805, SAN 807, SAN 809, SAN 810, SAN 821, SAN 825, SAN 841 as referenced in Application groundwater monitoring plan	Groundwater level	Monthly	In accordance with Groundwater Monitoring Plan as stated in the application.	--

Note 1 – Borehole IBA 1 to be fitted with an automatic level logger which records groundwater levels every 24 hours and an alarm with associated telemetry system as described in application.

Table S3.5 Particulate matter in ambient air – limits and monitoring requirements					
Monitoring Point Ref. /Description	Parameter	Limit (including Unit)	Monitoring Frequency	Monitoring Standard or Method	Other specifications
In accordance with the particulate monitoring plan	PM ₁₀	No limit set	[note 1]	As specified in the application.	--
	Deposited Particulate matter	No limit set	[note 1]		--

Note 1 – Sampling shall be undertaken at a two-week interval for a period of 8 weeks following the commencement of site operations. Monitoring frequency to be reviewed by the Environment Agency following the completion of the initial 8 weeks of monitoring. Any changes or improvements shall be agreed with the Environment Agency in writing.

Table S3.6 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Process building; IBA and IBAA storage pads	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary
Process building; IBA and IBAA storage pads	Dust	Daily	Visual assessment	Dust detection at the site boundary
Fuel storage tanks, storage lagoon, above-ground pipework	Integrity checks	Weekly	Visual assessment	--

Draft

Schedule 4 – Reporting

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

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Ambient air monitoring Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.5	[note 1]	[note 1]
Groundwater monitoring Parameters as required by condition 3.5.1	IBA 1, IBA 2, SAN 800	Every 3 months	1 January, 1 April, 1 July, 1 October
Other groundwater monitoring Parameters as required by condition 3.5.1	IBA 1, IBA 2, SAN 800, SAN 805, SAN 807, SAN 809, SAN 810, SAN 821, SAN 825, SAN 841	Every 3 months	1 January, 1 April, 1 July, 1 October

Note 1 – Reporting frequency to be set by the Environment Agency following the completion of the initial 8 weeks of monitoring. Any changes or improvements shall be agreed with the Environment Agency in writing.

Parameter	Units
Incinerator bottom ash processed	tonnes
Incinerator bottom ash aggregate recovered	tonnes
Ferrous metals recovered	tonnes
Non-ferrous metals recovered	tonnes
Surface water run-off tankered off-site	m ³

Parameter	Frequency of assessment	Units
Water usage	Annually	m ³
Energy usage	Annually	MWh
Raw material usage	Annually	tonnes or m ³

Media/parameter	Reporting format	Date of form
Ambient air	Form particulate 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY
Groundwater quality	Form groundwater 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY
Groundwater level	Form groundwater 2 or other form as agreed in writing by the Environment Agency	DD/MM/YY
Water usage	Form water usage 1 or other form as agreed in writing by	DD/MM/YY

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
	the Environment Agency	
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY
Waste returns	E-waste Return Form	--

Draft

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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
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 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.	

Name*	
Post	
Signature	
Date	

* 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.

“bottom ash” means ash falling through the grate or transported by the grate, or for incinerators which do not have a grate, an installation specific definition of bottom ash.

“building” means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

“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.

“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 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.

“impermeable surface” means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions.

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

“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.

“sealed drainage system” in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

- no liquids will run off the surface otherwise than via the system
- all liquids entering the system are collected in a sealed sump, except where liquids may be lawfully discharged to foul sewer.

“separation” means separating wastes into different material types, components and grades.

“sorting” means sorting that may be undertaken by hand or machinery. Sorting enables materials to be processed and recycled appropriately. It may involve separation of different waste types or the separation of different metal types including different ferrous metals, non-ferrous metals and non-metallic materials (e.g. paper and plastic). The sorted metals are graded by visual inspection, supplemented by chemical and other laboratory tests. The physical sorting may be assisted by conveyors and electromagnets.

“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.

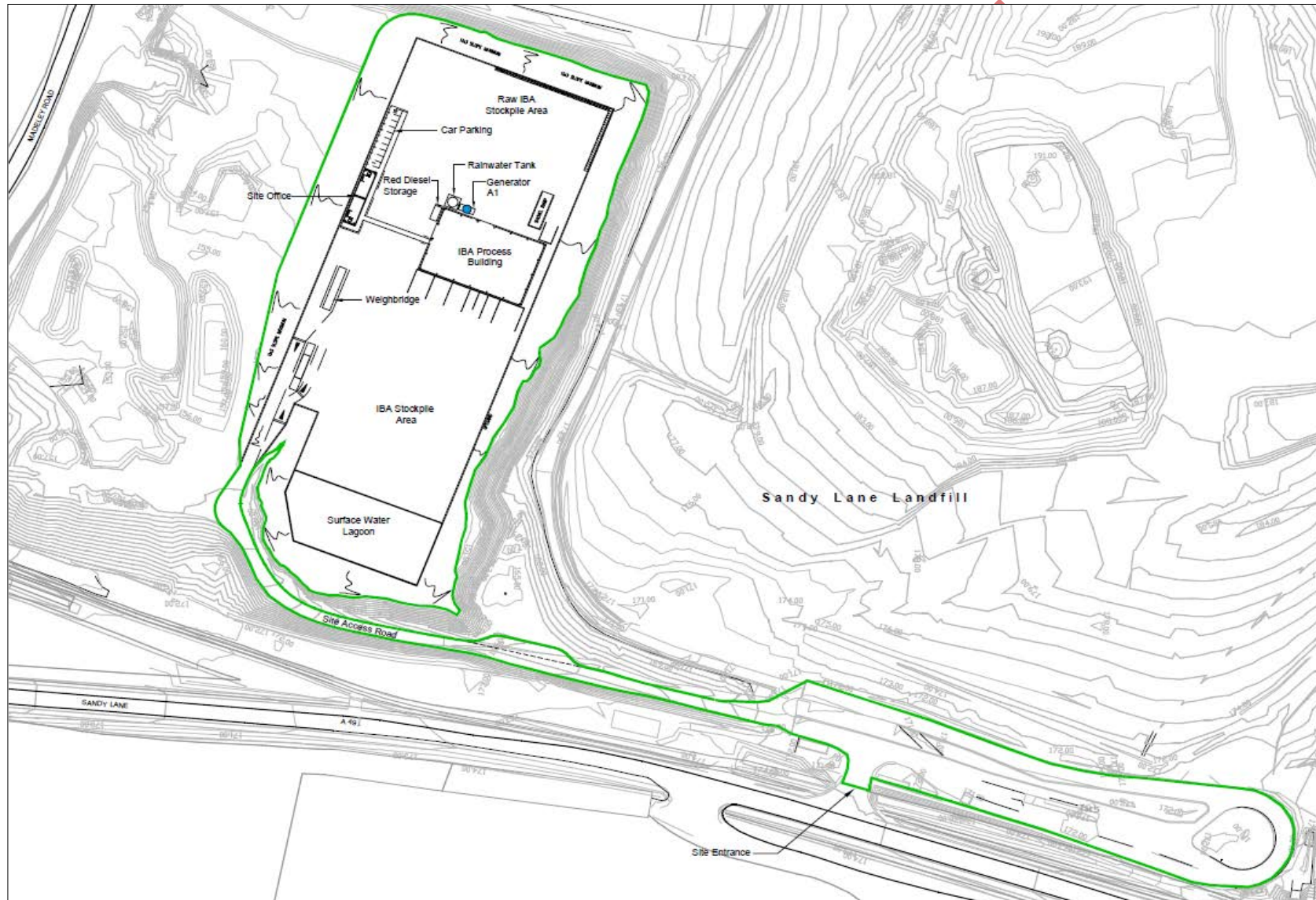
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

- 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
- 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.

Draft

Schedule 7 – Site plan



©Crown Copyright. All rights reserved. Environment Agency, 100024198, 2015.

END OF PERMIT.

Draft

Permit Number:	EPR/XP3030VM	Operator:	Ballast Phoenix Limited
Facility:	Sandy Lane IBA Facility	Form Number:	WaterUsage1 / DD/MM/YY

Reporting of Water Usage for the year _____

Water Source	Usage (m³/year)	Specific Usage (m³/unit output)
Mains water		
Site borehole		
River abstraction		
TOTAL WATER USAGE		

Operator's comments:

Signed

Date.....

(authorised to sign as representative of Operator)

Permit Number:	EPR/XP3030VM	Operator:	Ballast Phoenix Limited
Facility:	Sandy Lane IBA Facility	Form Number:	Energy1 / DD/MM/YY

Reporting of Energy Usage for the year

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh		
Natural Gas	MWh		
Gas Oil	tonnes		
Recovered Fuel Oil	tonnes		
Biogas	tonnes		
TOTAL	-		

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

Signed

Date.....

(Authorised to sign as representative of Operator)

Permit Number:	EPR/XP3030VM	Operator:	Ballast Phoenix Limited
Facility:	Sandy Lane IBA Facility	Form Number:	Performance1 / DD/MM/YY

Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY

Parameter	Units
Total raw material used	tonnes

Operator's comments:

Signed

Date.....

(Authorised to sign as representative of Operator)

Permit Number:	EPR/XP3030VM	Operator:	Ballast Phoenix Limited
Facility:	Sandy Lane IBA Facility	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]

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.
2. 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.
3. 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.
4. 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:	EPR/XP3030VM	Operator:	Ballast Phoenix Limited
Facility:	Sandy Lane IBA Facility	Form Number:	Groundwater2 / DD/MM/YY

Reporting of groundwater level 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]

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.
2. 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.
3. 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.
4. 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:	EPR/XP3030VM	Operator:	Ballast Phoenix Limited
Facility:	Sandy Lane IBA Facility	Form Number:	Particulate1 / DD/MM/YY

Reporting of particulates for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
In accordance with monitoring plan	PM ₁₀						
	Deposited Particulate Matter						

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.
2. 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.
3. 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.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed

Date.....

(Authorised to sign as representative of Operator)