



Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Biogenie Site Remediation Limited

Fawley Remediation Treatment and Recovery Facility

Esso Refinery

Fawley

Southampton

SO45 1TX

Permit number

EPR/ZP3133RH

Fawley Remediation Treatment and Recovery Facility

Permit number EPR/ZP3133RH

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The site is made up of a number of areas (a waste storage area, a treatment area and two restoration areas) located within the boundary of the Fawley Oil Refinery. The Fawley Oil Refinery is located approximately 6.5 Kilometres to the south of Southampton on the coast of Southampton Water.

This permit covers the remediation of contaminated soils and sludges produced at the Fawley Oil Refinery, the waste will be treated through bioremediation and where required post bioremediation stabilisation/ solidification. The permit also includes a waste activity for the deposit for recovery of treated or untreated wastes (where they meet waste acceptance criteria (WAC) for deposit for recovery) within two decommissioned areas of the Fawley Oil Refinery (Block 106 and Area 1).

Under an approved waste recovery plan, the restoration scheme aims to achieve ecological and safety benefits through the improvement of land quality and contouring. Waste materials will only be accepted for deposit for recovery once testing establishes that they meet each area's site specific WAC. Should testing establish that either the waste stream is not suitable for remediation treatment or, following remediation, that the waste is non-compliant with the WAC for deposit for recovery, it will be rejected sent off-site to a suitably licensed facility for further treatment or disposal.

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/ZP3133RH/A001	Duly made 27/11/2015	Application for new permit for a remediation treatment facility with a deposit for recovery activity
Additional information received Response to Schedule 5 notice	15/09/2016	Amended waste recovery plan.
Additional information received Response to Schedule 5 notice	28/10/2016	Amended site plan and certificate of continuing competence.
Permit determined EPR/ZP3133RH (PAS Billing ref. ZP3133RH, EAWML Billing ref. EAWML 400080).	04/11/2016	Permit issued to Biogenie Site Remediation Limited.

Other Part A installation permits relating to this installation		
Operator	Permit number	Date of issue
Esso Petroleum Company Limited	EPR/BR6996IC	20/12/2007

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/ZP3133RH

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

Biogenie Site Remediation Limited (“the operator”),

whose registered office is

Unit 8 Commerce Park

Brunel Road

Theale

Reading

Berkshire

RG7 4AB

company registration number 03932238

to operate an installation at

Fawley Remediation Treatment and Recovery Facility

Esso Refinery

Fawley

Southampton

SO45 1TX

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

Name	Date
Tom Swift	04/11/2016

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

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

1.2 Energy efficiency

- 1.2.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A7) the operator shall:
- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
 - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
 - (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

- 1.3.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A7) 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.

1.5 Multiple operator installations

- 1.5.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A7 etc.) Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

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 For the following activities referenced in schedule 1, table S1.1 (A1 to A7) 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, which is within the area edged in red on the site plan that represents the extent of the installation covered by this permit and those of the other operators of the installation.

2.3 Operating techniques

- 2.3.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A7) 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(s) S2.2, S2.3 and S2.4 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.

Hazardous waste storage and treatment

- 2.3.7 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

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) point source emissions specified in tables S3.1 and S3.2;
- (b) process monitoring specified in table S3.3;

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 and S3.3 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;
 - (ii) matters which affect the condition of the land and groundwater; and
 - (iii) waste types and quantities.
- 4.1.2 The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery, origin and the identity of the carrier and producer of any waste that is received for recovery. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.
- 4.1.3 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 For the following activities referenced in schedule 1, table S1.1 (A1 to A7) 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:
- (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.
- 4.3.6 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 “without delay”, in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
A1	S5.3 A(1)(a)(i)	<p>Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment</p> <p>R3: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)</p>	<p>Bioremediation of hazardous waste for the purpose of recovery.</p> <p>Bioremediation of waste under aerobic conditions on an impermeable surface with sealed drainage system.</p> <p>Biopiles shall be no higher than 3m.</p> <p>Temporary storage of hazardous waste following bioremediation pending further treatment, deposit for the purpose of recovery (in Block 106 or Area 1) or off site disposal.</p> <p>Only wastes originating from the Fawley Oil Refinery shall be accepted at the site. Waste types and quantity as specified in Table S2.2.</p>
A2	S5.3A(1)(a)(ii)	<p>Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment</p> <p>R5: Recycling/reclamation of other inorganic materials</p>	<p>Stabilisation/ solidification of hazardous waste for the purpose of recovery.</p> <p>Stabilisation/ solidification of waste on an impermeable surface with sealed drainage system.</p> <p>Temporary storage of hazardous waste following stabilisation/ solidification pending deposit for the purpose of recovery (in Block 106 or Area 1) or off site disposal.</p> <p>Only wastes originating from the Fawley Oil Refinery shall be accepted at the site. Wastes as specified in table S2.3</p>

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
A3	S5.6 A(1)(a)	<p>The temporary storage of hazardous waste in a facility with a total capacity exceeding 50 tonnes pending any of the activities listed in sections 5.1, 5.2 and 5.3.</p> <p>R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p>D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)</p>	<p>Secure temporary storage of untreated hazardous waste pending treatment or off site disposal.</p> <p>Storage of waste on an impermeable surface with sealed drainage system.</p> <p>Only wastes originating from the Fawley Oil Refinery shall be accepted at the site. Wastes as specified in tables S2.2 and S2.3</p>
Directly Associated Activity			
A4	Fuel storage	Storage of fuel.	From receipt of fuel to use on-site for power generation
A5	Raw materials storage and handling	Temporary storage of raw materials including; solidifying agents such as ash prior to use in the stabilisation/ solidification process and nitrogen-based fertiliser prior to use in the bioremediation process.	From the receipt of raw materials to despatch for use within the facility.
A6	Waste water effluent/ leachate handling and storage	Storage and handling of waste water effluent/ leachate arising from processing activities, prior to discharge to effluent treatment plant for treatment.	From generation of process effluent/ leachate to discharge of effluent to effluent treatment plant (regulated under permit reference EPR/BR69961C).
A7	Operation of site services and utilities	Operation of a generator for the supply of electricity for the remediation process.	Site utility and services systems as far as the installation boundary; combustion units < 20MWth input.
Activity reference	Description of activities for waste operations		Limits of activities
A8	<p>Bioremediation process for non-hazardous waste:</p> <p>R3: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)</p>		<p>Bioremediation of non-hazardous waste for the purpose of recovery.</p> <p>Bioremediation of waste under aerobic conditions on an impermeable surface with sealed drainage system.</p>

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
			<p>Treatment of non-hazardous waste subject to an R3 activity (Biological treatment only) shall not exceed 75 tonnes per day.</p> <p>Only wastes originating from the Fawley Oil Refinery shall be accepted at the site. Waste types as specified in Table S2.2</p>
A9	<p>Stabilisation/ solidification process for non-hazardous waste:</p> <p>R5: Recycling/reclamation of other inorganic materials</p>		<p>Stabilisation/ solidification of non-hazardous waste for the purpose of recovery.</p> <p>Stabilisation/ solidification of waste on an impermeable surface with sealed drainage system.</p> <p>Only wastes originating from the Fawley Oil Refinery shall be accepted at the site. Waste types as specified in Table S2.3</p>
A10	<p>Temporary storage of non-hazardous waste:</p> <p>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p>D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)</p>		<p>Secure temporary storage of non-hazardous wastes listed in table S2.2, S2.3 and S2.4 pending further treatment, deposit for the purpose of recovery (in Block 106 or Area 1) or offsite disposal.</p> <p>Only wastes originating from the Fawley Oil Refinery shall be accepted at the site.</p> <p>Storage of waste listed in Table S2.4 shall be limited to 12 months prior to deposit for the purpose of recovery (in Block 106 or Area 1).</p>
A11	<p>Deposit of waste to land as a recovery operation:</p> <p>R5: Recycling/reclamation of other inorganic compounds</p> <p>R10: Land treatment resulting in benefit to agriculture or ecological improvement</p>		<p>Use of waste types specified in table S2.4 for the purposes of restoration, reclamation or improvement of land as detailed in the approved waste recovery plan.</p> <p>Only wastes originating from the Fawley Oil Refinery shall be accepted at the site.</p>

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/ZP3133RH/A001	Application forms B2, B3 and B4 and referenced supporting information.	27/11/2015

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/ZP3133RH/A001	Approved waste recovery plan document (reference ESS1859/BPA2015/05 Revision 5 dated May 2015) except where superseded by the addendum to the waste recovery plan received 15/09/2016	27/11/2015
Final response to Schedule 5 Notice Dated 22/01/2016	Addendum to the waste recovery plan (and all associated appendices) (reference 407.00457.000011 dated September 2016)	15/09/2016

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
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Table S2.2 Permitted waste types and quantities for treatment in the bioremediation process	
Maximum quantity	In total no more than 15,750 tonnes per annum waste will be accepted for treatment at the site.
Waste code	Description
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
05 01	wastes from petroleum refining
05 01 03*	tank bottom sludges
05 01 09*	sludges from on-site effluent treatment containing hazardous substances
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03*	soil and stones containing hazardous substances
17 05 04	soil and stones other than those mentioned in 17 05 03

Table S2.3 Permitted waste types and quantities for treatment in the stabilisation/ solidification process	
Maximum quantity	In total no more than 15,750 tonnes per annum waste will be accepted for treatment at the site.
Waste code	Description
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03*	soil and stones containing hazardous substances
17 05 04	soil and stones other than those mentioned in 17 05 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 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 11*	other wastes containing hazardous substances
19 02 99	Post-bioremediation wastes compliant with waste acceptance criteria

Table S2.4 Permitted waste types and quantities for use of waste in deposit for recovery	
Maximum quantity	The total quantity of waste accepted at the site shall be less than 9915m³
Waste code	Description
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
05 01	wastes from petroleum refining
05 01 03*	tank bottom sludges
05 01 09*	sludges from on-site effluent treatment containing hazardous substances
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03*	soil and stones containing hazardous substances
17 05 04	soil and stones other than those mentioned in 17 05 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 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 11*	other wastes containing hazardous substances
19 02 99	Post-bioremediation wastes compliant with waste acceptance criteria
19 03	stabilised/solidified wastes
19 03 04*	wastes marked as hazardous, partly stabilised other than 19 03 08
19 03 05	stabilised wastes other than those mentioned in 19 03 04

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 (Shown as point E on drawing 003 (<i>Proposed Bioremediation & Storage Area Layout</i>) submitted with application EPR/ZP3133RH/A001)	Air extraction from biopiles via stack exhaust	Total Petroleum Hydrocarbons (TPH)	No limit set	--	--	
		Total Volatile Organic Compounds (VOCs)	No limit set	--	--	
		Polycyclic Aromatic Hydrocarbons (PAHs)	No limit set	--	--	

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 – discharge to effluent treatment plant (regulated under permit reference EPR/BR6996IC) Shown as point D on drawing 003 (<i>Proposed Bioremediation & Storage Area Layout</i>) submitted with application EPR/ZP3133RH/A001)	Process effluent	No parameters set	--	--	--	--

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Internal for each biopile batch during bioremediation	Temperature	As required	Temperature probe	Monitoring equipment shall be available on site and used as required to maintain aerobic conditions and ensure compliance with this permit. Equipment shall be calibrated on a 6 monthly basis or as agreed in writing by the Environment Agency.
	Moisture	As required	None specified	
	pH	As required	None specified	
	Oxygen	As required	None specified	

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	A1	Every 12 months	1 January

Table S4.2: Annual production/treatment	
Parameter	Units
Bioremediation Plant (treatment)	Tonnes per year
Stabilisation/ Solidification Plant (treatment)	Tonnes per year

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWh

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	12/10/2016
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	12/10/2016
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	12/10/2016
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	12/10/2016
Waste returns	E-Waste Return Form	--

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

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.

“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 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.

“Hazardous property” has the meaning in Annex III of the Waste Framework Directive.

“Hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

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

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

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

“Pests” means Birds, Vermin and Insects.

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

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

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes 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

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.

“year” means calendar year ending 31 December.

When the following terms appear in the waste code list in Schedule 2, table 2.2 and table S2.3 for those tables, they have the meaning given below:

‘hazardous substance’ means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008

‘heavy metal’ means any compound of antimony, arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, tellurium, thallium and tin, as well as these materials in metallic form, as far as these are classified as hazardous substances

‘PCBs’ means

- polychlorinated biphenyls
- polychlorinated terphenyls
- monomethyl-tetrachlorodiphenyl methane, Monomethyl-dichloro-diphenyl methane, Monomethyldibromo-diphenyl methane
- any mixture containing any of the above mentioned substances in a total of more than 0,005 %by weight

‘transition metals’ means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified as hazardous substances

‘stabilisation’ means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste

‘solidification’ means processes which only change the physical state of the waste by using additives without changing the chemical properties of the waste

‘partly stabilised wastes’ means wastes containing, after the stabilisation process, hazardous constituents which have not been changed completely into non-hazardous constituents and could be released into the environment in the short, middle or long term

Schedule 7 – Site plan



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END OF PERMIT

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