

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Dunton Environmental Limited

Horseley Field Waste Treatment Facility
Lower Horseley Field
Union Mill Street

Wolverhampton WV1 3DW

Permit number

EPR/BP3331DD

Horseley Field Waste Treatment Facility Permit number EPR/BP3331DD

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 on Union Mill Street approximately 830m east from the centre of Wolverhampton at grid reference (NGR) SO 92316 98608. The site is bounded to the east by offices, the north east by Union Mill Street residential properties and to the south by Horseley Fields Road and business units.

The facility consists of two installation treatment activities and associated waste storage for which the Operator will implement their own management system. The site will accept hazardous waste including soils contaminated with hydrocarbons and asbestos containing materials. Waste will be processed via the appropriate scheduled activities under the Industrial Emissions Directive and undertaken using Best Available Techniques. Installation activities include:

- Section 5.3 Part A (1) (a) (i) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment of hazardous waste (bioremediation). This activity consists of the application of a microorganism and nutrient formula to the waste followed by thorough mixing. The mixture is then placed in an enclosure with extraction to allow the bioremediation process to breakdown the hydrocarbon content to appropriate standards.
- Section 5.3 Part A (1) (a) (ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment of hazardous waste (asbestos treatment). This activity consists of the storage and picking of asbestos containing materials from contaminated waste. The Operator will utilise enclosed storage and enclosed treatment served by an appropriate extraction and abatement system. This activity will not include the treatment of wastes containing hazardous levels of fibrous asbestos.
- Section 5.6 Part A (1) (a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.1, 5.2 and 5.3.

These scheduled activities are supported by six Directly Associated Activities:

- Pre-screening of waste:
- The treatment of waste water via a granular activated carbon filter and oil interceptor;
- Onsite storage of fuel and raw materials;
- Storage of site surface water;
- Bulking and storage of asbestos waste; and
- Storage of treated waste.

The site also undertakes a waste operation which will treat non-hazardous wastes via dewatering for onward recovery or disposal.

The site has an annual throughput of 200,000 tonnes spilt between the treatment activities, and a daily throughput of 666 tonnes.

The site has two point source air emissions from the site's emissions abatement equipment and a point source emissions to sewer for site runoff. Surface water from operational areas will undergo treatment via an interceptor and granular activated carbon filter, stored and then tested prior to discharge. If the runoff does not meet the sewer undertaker discharge consent it will be disposed of offsite. The principle releases will be in the form of fugitive emissions such as odour and dust as well as waste sent offsite for recovery or disposal. Site abatement will include carbon adsorption for the treatment of VOC's from the bioremediation process and an electrostatic preceptor/bag filter for the treatment of emissions from the enclosed asbestos storage and picking processes. All reception, treatment and storage area will be on an impermeable surface with sealed drainage. Waste storage will be appropriately segregated to prevent cross contamination.

There is 1 special area of conservation within 10km of the installation and 11 local wildlife sites with 2km. Assessment by the Environment Agency shows that emissions from activities undertaken at the Installation are unlikely to have a significant impact on the habitat 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/BP3331DD/A001	Duly made 23/02/2017	Application for a hazardous waste treatment installation and a non-hazardous waste treatment waste operation.
Additional Information	02/06/2017	Confirmed removal of Heavy Metal Treatment activity from application.
Response to Schedule 5 Notices dated 21/03/2017 and 28/06/2017	03/08/2017	Revision of all application supporting documents including operating techniques and BAT justifications.
Response to Schedule 5 Notice dated 25/08/2017	08/09/2017	Bioremediation operating techniques.
Additional information received	12/09/2017	Revised dust management plan, odour management plan, best available techniques document and operating techniques document.
Permit determined EPR/BP3331DD (PAS Billing ref. BP3331DD, EAWML Billing ref. EAWML 403686).	18/10/2017	Permit issued to Dunton Environmental Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/BP3331DD

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Dunton Environmental Limited ("the operator"),

whose registered office is

Unit 1
Tamebridge Industrial Estate
Aldridge Road
Perry Barr
Birmingham
B42 2TX

company registration number 05839536

to operate an installation and a waste operation at

Horseley Field Waste Treatment Facility Lower Horseley Field Union Mill Street Wolverhampton WV1 3DW

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

Name	Date
Mike Jenkins	18/10/2017

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 (AR1 to AR9), 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 (AR1 to AR9), 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 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR9), 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 Waste shall only be accepted if:
 - (a) it is of a type and quantity listed in schedule 2, tables S2.2, S2.3 and S2.4.
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.4 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.
- 2.3.5 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

2.3.6 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.

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 operations specified in schedule 1, table S1.4 shall not commence until the measures specified in that table 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.

3.4 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.

3.5 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; and
 - (b) ambient air 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 and S3.2 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 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR9), 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 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 "immediately" in which case it may be provided by telephone.

Schedule 1 – Operations

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
AR1	S5.3 Part A (1) (a) (i)	Ex-situ treatment of waste via bioremediation. R3 Recycling/reclamation of organic substances which are not used as solvents.	From storage of wastes and receipt of raw materials, to treatment via bioremediation and despatch of waste offsite. This activity will only be used to treat hydrocarbon contamination. Waste with any other hazardous properties shall not be subject to this process. The biopile gas extraction system must be operational during treatment. This activity will not include the treatment of wastes containing hazardous levels of fibrous asbestos.
			Waste types as specified in Table S2.2.
AR2 S5.3	S5.3 Part A (1) (a) (ii)	Ex-situ treatment of waste contaminated with asbestos containing materials by picking. R5 Recycling/reclamation of other inorganic compounds	From receipt of waste to storage and treatment of waste in enclosed picking station with abatement prior to being subject to bioremediation or sent offsite for disposal or recovery.
		D9 Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12	The extraction system must be operational during storage and treatment. Waste subject to this process shall only be hazardous due to asbestos contamination or hydrocarbon contamination.
			This activity will not include the treatment of wastes containing hazardous levels of fibrous asbestos.
			Waste types as specified in Table S2.3.

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
AR3	S5.6 Part A (1) (a)	Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.1, 5.2 and 5.3	Storage of hazardous waste on an impermeable surface with sealed drainage.
			Waste types as specified in Table S2.2 and S2.3.
	Directly Associated Activity	1	
AR4	Storage of treated non- hazardous waste.	Storage of treated non- hazardous was from asbestos and bioremediation treatment activities.	To be stored on an area of impermeable surface with sealed drainage.
AR5	Onsite storage of fuel and raw materials.	Storage of fuel for vehicles and Bioaccelerator ingredients	Ingredients will be stored within IBC's on an impermeable surface with sealed drainage.
AR6	Storage of site surface water.	Storage of surface water runoff from the treatment and processing areas.	Storage of runoff from areas of site storing and treating non-hazardous in 1 holding tank. Storage of runoff from areas
			of the site storing and treatment hazardous waste in 2 holding tanks.
AR7	Bulking and storage of asbestos waste.	Storage of asbestos in bags within skips.	Asbestos waste shall be double bagged and kept within clearly identified, segregated, secure, lockable containers on an impermeable surface with sealed drainage system.
			All treatment must take place on an impermeable surface with sealed drainage.
AR8	The treatment of waste water.	Treatment via an interceptor and granular activated carbon filter.	Treated water to be stored and removed from site for appropriate treatment if it does not meet the criteria of the sewer discharge consent.

Table S1.1 ac	tivities	T		
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of activity and North I and II opera	VFD Annex	Limits of specified activity and waste types
AR9	Pre-screening of waste. Screening of wasteremove any may which are not subjoremediation.		aterials suitable for	All treatment must take place on an impermeable surface with sealed drainage.
				Waste types as specified in Table S2.2
Activity reference	Description of activities for operations	cription of activities for waste ations		ctivities
AR10	R13 Storage of waste pend operations numbered (excluding temporary spending collection, on where it is produced) R3 Recycling/reclamation substances which are solvents R5 Recycling/reclamation inorganic compounds D9 Physico-chemical treat specified elsewhere in which results in final comixtures which are dismeans of any of the opnumbered D1 to D12 D15 Storage pending any coperations numbered (excluding temporary spending spending temporary)	Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) Recycling/reclamation of organic substances which are not used as solvents Recycling/reclamation of other inorganic compounds Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site		operations shall be limited to: atment via dewatering for the recovery/disposal. be no treatment of hazardous ewatering. an 50 tonnes shall be treated disposal If be stored for no longer than 1 of disposal and 3 years prior to hall be stored and treated on able surface with sealed stem.
			Waste types	s as specified in Table S2.4

Table S1.2 Operating techniques		
Description	Parts	Date Received
Response to Schedule 5 Notice dated 21/03/2017 and 28/06/2017	Responses to all questions and revised documentation excluding all operating techniques relating to waste conditioning using Cement Kiln Dust, Lime and Hydrogen Peroxide. Noise management plan.	03/08/2017
Response to Schedule 5 Notice dated 25/08/2017	Responses to questions 1,2,3,4,5,6, regarding Prescreening, mulch not used during treatment, metal benchmarks for waste acceptance, use of "Lego Blocks" as windbreaks, turning of biopiles and odour monitoring locations.	08/09/2017
Additional information received	Revised dust management plan, odour management plan, best available techniques document and operating techniques documents.	12/09/2017

	mprovement programme requirements	Data
Reference	Requirement	Date
IC1	Following the commissioning of the installation and waste operation, the Operator shall submit a report to the Environment Agency detailing the outcome of the commissioning programme. The report shall include the identification of, and justification for, any changes to the operating techniques provided in the application EPR/BP3331DD/A001.	2 weeks following commencement of operations
IC2	The Operator shall undertake 6 months of MCERTs standard monitoring of the carbon abatement and electrostatic precipitator/bag filter abatement system emissions and submit a report to the Environment Agency for written agreement demonstrating that the abatement systems are treating emissions to the standards outlined in the manufacturers' recommendations.	7 months following commencement of operations
	If the emissions released from the abatement systems do not achieve the Manufacturers recommendation the Operator shall submit proposals to the Environment Agency along with timescales of implementation to improve the efficacy of the abatement system or provide alternative abatement.	
	The Operator shall implement the proposals within the timescale agreed with the Environment Agency.	
IC3	The Operator shall submit a report to the Environment Agency for written approval reviewing the efficacy of the bioremediation process. The report shall include: • Amount of waste treated via bioremediation • Amount of waste treated within target timescales • Results of validation testing for successfully treated waste • Amount of waste re-treated • Amount of waste disposed of after bioremediation treatment. If the results of the report show significant retreatment of waste or unsuccessful treatment of waste via bioremediation after three rounds of treatment, the Operator shall submit proposals to improve the efficacy of the process along with the timescale for implementation to the Environment Agency for written approval.	6 months following commencement of operations
	The Operator shall implement the proposals in line with the timescales agreed with the Environment Agency.	
IC4	The Operator shall undertake 6 months of noise monitoring and submit a report to the Environment Agency for written approval which reviews the effectiveness of the site's noise management plan in line with BS4142/2014 In the event the noise monitoring identifies the need for further noise abatement measures the operator shall propose additional measures along with timescales for implementation to the Environment Agency for Written approval.	7 months after commencement of all site treatment operations.
	The Operator shall implement any further abatement measures in line with the timescales agreed with the Environment Agency.	
IC5	The Operator shall undertake 6 months of dust, particulate matter and asbestos monitoring in line with M17 guidance and submit a report to the Environment Agency for written approval which reviews the effectiveness of the dust management plan and whether ambient air monitoring environmental standards for PM ₁₀ and asbestos fibres are being achieved.	7 months after commencement of all site treatment operations.
	In the event the dust monitoring identifies the need for further dust and particulate matter abatement measures the operator shall propose additional measures along with timescales for implementation to the	

Table S1.3 I	Table S1.3 Improvement programme requirements		
Reference	Requirement	Date	
	Environment Agency for written approval		
	The Operator shall implement any further abatement measures in line with the timescales agreed with the Environment Agency.		
IC6a	The Operator shall undertake daily asbestos monitoring for the first week of commencing asbestos storage and treatment and submit results the Environment Agency for Written Approval.	1 week from commencing asbestos storage and treatment	
IC6b	Following completion of IC6a, if emissions of asbestos fibres are demonstrated as being less than 0.01 fibres/ml, once approved by the Environment Agency, the Operator may reduce asbestos monitoring frequency to weekly for the next 5 weeks and submit results to the Environment Agency. If Following the 5 week period referred to above, if emissions are demonstrated as being consistently less than 0.01 fibres/ml, if approved by the Environment Agency, the Operator may reduce asbestos monitoring frequency to monthly.	6 weeks from commencing asbestos storage and treatment	
	In the event asbestos emissions above 0.01 fibres/ml are detected during monthly monitoring the Operator shall propose more frequent monitoring and timescales for implementation to the Environment Agency for written approval.		
	The Operator shall implement more frequent monitoring in line with the timescale agreed with the Environment Agency.		

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
1	The Operator shall notify the Environment Agency in writing 1 week prior to commencing operations.
2	Prior to operation, the operator shall install all concrete surfacing and associated infrastructure including drainage systems and demonstrate to the Environment Agency for written agreement that it has been installed to an appropriate CQA standard and signed off by an appropriately qualified person.
2	Prior to undertaking any bioremediation treatment processes onsite the Operator shall submit to the Environment Agency a report outlining the specific operating parameters of the abatement system chosen to serve the bioremediation treatment. The report shall include justification as to why the operating parameters will ensure effective and efficient treatment of the VOC emissions from the bioremediation process. The Operator shall also demonstrate how they will monitor the abatement system to ensure optimum operating parameters are maintained. The monitoring and parameters must include: Residence time Media and impregnation Air flow Operating temperatures and humidity Treatment performance/efficacy.
3	Prior to undertaking any bioremediation activities the Operator shall demonstrate to the Environment Agency that all VOC emissions containment infrastructure and emissions abatement systems associated with this treatment activity have been appropriately installed in line with the manufacturer recommendations.
4	Prior to undertaking any asbestos picking or asbestos storage the Operator shall

Table S1.4 Pre-op	Table S1.4 Pre-operational measures	
Reference	Pre-operational measures	
	submit to the Environment Agency a report outlining the specific operating parameters of the abatement system with justification as to why the parameters will ensure effective optimal treatment of dust, potential asbestos fibre emissions and PM ₁₀ 's.	
	The Operator shall also demonstrate how they will monitor the abatement system to ensure optimum operating parameters are maintained.	
	The monitoring and operating parameters must include:	
	Filter porosity	
	• Flow	
5	Prior to undertaking any asbestos treatment activities the Operator shall demonstrate to the Environment Agency that all dust, particulate matter and asbestos emission containment infrastructure and abatement systems associated with this activity have been appropriately installed in line with the manufacturer recommendations.	
6	Prior to undertaking any dewatering activities the Operator shall demonstrate to the Environment Agency that all emissions containment infrastructure associated with this activity has been appropriately installed in line with the manufacturer recommendations.	
7	Prior to operation the Operator shall submit a site plan to the Environment Agency for written approval which confirms the location of the site's point source air emissions from the abatement systems releases.	
8	Prior to sending any waste offsite as a non-waste the Operator shall submit a written report to the Environment Agency for written approval that demonstrates the waste meets relevant end of waste criteria.	

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
-	-

Table S2.2 Permitte	d waste types and quantities for bioremediation
Maximum quantity	Annual throughput shall be less than 200,000 tonnes for all activities in table S1.1
	Waste hazardous properties H3, HP7 and HP14.
Waste code	Description
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 05	drilling muds and other drilling wastes
01 05 05*	oil-containing drilling muds and wastes
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 06*	oily sludges from maintenance operations of the plant or equipment
06	Wastes from inorganic chemical processes
06 05	sludges from on-site effluent treatment
06 05 02*	sludges from on-site effluent treatment containing dangerous substances
10	Wastes from thermal processes
10 02	wastes from the iron and steel industry
10 02 07*	solid wastes from gas treatment containing dangerous substances
10 02 13*	sludges and filter cakes from gas treatment containing dangerous substances
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 12*	solid wastes from gas treatment containing dangerous substances
13	Oil wastes and wastes of liquid fuels (except edible oils, and those in chapte 05, 12 and 19)
13 05	oil/water separator contents
13 05 01*	solids from grit chambers and oil/water separators
13 05 02*	sludges from oil/water separators
13 05 03*	interceptor sludges
13 05 08*	mixtures of wastes from grit chambers and oil/water separators
16	Wastes not otherwise specified in the list
16 07	wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)
16 07 08*	wastes containing oil
16 07 09*	wastes containing other hazardous substances

Table S2.2 Permitte	d waste types and quantities for bioremediation
Maximum quantity	Annual throughput shall be less than 200,000 tonnes for all activities in table S1.1 Waste hazardous properties H3, HP7 and HP14.
Waste code	Description
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03*	soil and stones containing hazardous substances
17 05 05*	dredging spoil containing hazardous substances
17 05 07*	track ballast containing hazardous substances
17 09	other construction and demolition wastes
17 09 03*	other construction and demolition wastes (including mixed wastes) containing hazardous substances
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 19 02 04*	wastes from physico/chemical treatments of waste (including dechromatation,
	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 04*	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) premixed wastes composed of at least one hazardous waste
19 02 04* 19 02 05*	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) premixed wastes composed of at least one hazardous waste sludges from physico/chemical treatment containing hazardous substances
19 02 04* 19 02 05* 19 03	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) premixed wastes composed of at least one hazardous waste sludges from physico/chemical treatment containing hazardous substances stabilised/solidified wastes
19 02 04* 19 02 05* 19 03 19 03 04*	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) premixed wastes composed of at least one hazardous waste sludges from physico/chemical treatment containing hazardous substances stabilised/solidified wastes wastes marked as hazardous, partly stabilised other than 19 03 08
19 02 04* 19 02 05* 19 03 19 03 04* 19 03 06*	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) premixed wastes composed of at least one hazardous waste sludges from physico/chemical treatment containing hazardous substances stabilised/solidified wastes wastes marked as hazardous, partly stabilised other than 19 03 08 wastes marked as hazardous, solidified wastes from the mechanical treatment of waste (for example sorting,
19 02 04* 19 02 05* 19 03 19 03 04* 19 03 06* 19 12	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) premixed wastes composed of at least one hazardous waste sludges from physico/chemical treatment containing hazardous substances stabilised/solidified wastes wastes marked as hazardous, partly stabilised other than 19 03 08 wastes marked as hazardous, solidified wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified other wastes (including mixtures of materials) from mechanical treatment of waste
19 02 04* 19 02 05* 19 03 19 03 04* 19 03 06* 19 12	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) premixed wastes composed of at least one hazardous waste sludges from physico/chemical treatment containing hazardous substances stabilised/solidified wastes wastes marked as hazardous, partly stabilised other than 19 03 08 wastes marked as hazardous, solidified wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
19 02 04* 19 02 05* 19 03 19 03 04* 19 03 06* 19 12 19 12 11* 19 13	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) premixed wastes composed of at least one hazardous waste sludges from physico/chemical treatment containing hazardous substances stabilised/solidified wastes wastes marked as hazardous, partly stabilised other than 19 03 08 wastes marked as hazardous, solidified wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances wastes from soil and groundwater remediation
19 02 04* 19 02 05* 19 03 19 03 04* 19 03 06* 19 12 19 12 11* 19 13 19 13 01*	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) premixed wastes composed of at least one hazardous waste sludges from physico/chemical treatment containing hazardous substances stabilised/solidified wastes wastes marked as hazardous, partly stabilised other than 19 03 08 wastes marked as hazardous, solidified wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances wastes from soil and groundwater remediation solid wastes from soil remediation containing hazardous substances

Table S2.3 Permitted waste types and quantities for asbestos picking		
Maximum quantity	Annual throughput shall be less than 200,000 tonnes for all activities in table S1.1 Waste hazardous properties H3, HP4, HP5, and HP7. HP14	
Waste code	Description	
17	Construction and demolition wastes (including excavated soil from contaminated sites)	
17 06	Insulation materials and asbestos-containing construction materials	
17 06 05*	construction materials containing asbestos	
17 05 03*	soil and stones containing hazardous substances	

Table S2.4 Permittee	d waste types and quantities for dewatering
Maximum quantity	Annual throughput shall be less than 50,000 tonnes for activity AR10
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 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 03	other municipal wastes
20 03 03	street-cleaning residues

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
Location to be confirmed in line with Pre operational condition 7	Carbon abatement system exhaust	VOC	-	-	-	-
Location to be confirmed in line with Pre operational condition 7	Carbon abatement system exhaust	VOC	-	-	-	-
Location to be confirmed in line with Pre operational condition 7	Electrostatic precipitator/bag filter exhaust	Asbestos fibres, dust and PM ₁₀	-	-	-	-

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
Discharge to sewer via Seven Trent Trade Effluent as shown on drainage plan reference DEL/A101070/DRN/02 dated 31/7/17 submitted with application EPR/BP331DD/A001	-	-	-	-	-	-

Location or description of point of measurement	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method	Other specifications
A,B,C,D drawing reference Appendix D – Dust Monitoring Locations submitted with application EPR/BP3331DD/A 001	Particulate matter	200 mg m- 2 day-1	Continuous	Daily for the first week of operations then monthly thereafter	In line with M17 monitoring guidance	Monitoring equipment should meet the MCERTS Performance standards for indicative ambient particulate monitors

Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method	Other specifications or similar standard agreed in writing with the Environment Agency. The equipment shall be
					standard agreed in writing with the Environment Agency. The equipment shall be
					shall be
					calibrated in accordance with the manufacturers recommendati ons or 6 monthly, whichever is first
					The system must be managed and maintained by suitably trained personnel.
					The system must obtain representative data that must accurately reflect PM ₁₀ levels produced by the site's activities.
Asbestos fibres	1 hour at 8 l/min	0.01 fibres/ml	As per IC6a and IC6b	In line with M17 monitoring guidance	Pumped sampling 1m above ground level Flow rate = 4 litres/minute
					Minimum sample volume = 480 litres
					Filter pore size = 1.2µm Asbestos fibre limit of detection =
				ores 8 I/min fibres/ml IC6a and	ores 8 I/min fibres/ml IC6a and M17 monitoring

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
Ambient air monitoring Parameters as required by condition 3.5.1	A,B,C,D and Downwind of Asbestos activities	Every 3 months	1 January, 1 April, 1 July, 1 October

Table S4.2: Annual production/treatment		
Parameter	Units	
Waste Treated	tonnes	
Hazardous waste recovered	tonnes	

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

Table S4.4 Reporting forms				
Media/parameter	Reporting format	Date of form		
Particulate Matter and Asbestos Fibres	Form particle 1 or other form as agreed in writing by the Environment Agency	18/10/2017		
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	18/10/2017		
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	18/10/2017		
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	18/10/2017		

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	
	any malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is pollution
To be notified within 24 hours of o	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 t	he breach of a limit
To be notified within 24 hours of o	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 brea	ach of a limit
Parameter	Notification period
(c) Notification requirements for the detection of any sign	nificant 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	
Any more accurate information on the matters for	practicable
	practicable
Any more accurate information on the matters for	practicable
Any more accurate information on the matters for notification under Part A. Measures taken, or intended to be taken, to prevent	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	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	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	practicable
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.	practicable

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.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 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.

"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.

"guarter" 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

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 S2.2, S2.3 and S2.4, for that table/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.

"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.

Plan Key Concrete Schedule 7 – Site plan Hardstanding Biopile Non-Hazardous Stockpile Asbestos Stockpiles Treated Stockpiles Hazardous Waste Stockpiles Noise Screening Bunds **Buildings and Site** Infrastructure Water Storage Tanks Non-Hazardous Storage Bays Site Boundary NON-HAZARDOUS TREATEMENT AREA Locked Asbestos Coptoines Old Main Lne Canal BT Compound (containing pumps and other abatement Pre-treatment of Hazardous Waste Area infrastructure) Wates Hazardous Waste Incidentals Bays Boundary Storage Bays A454 Horseley Fields Noise bund A454 Horseley Fields Bunded Fuel Entrance Storage Tank (Gated) HYDROCARBON TREATMENT AREA

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