

Brookhurst Wood - Open Windrow Compost Facility

Environmental Permit Variation EPR/AB3700LS/V006
Non-Technical Summary

Biffa Waste Services Ltd

Project reference: EPR/AB3700LS/V006
Project number: 60684371
60684371-ACM-XX-00-RP-OWC-NTS-R03

12 October 2023

Quality information

Prepared by	Checked by	Verified by	Approved by
Diane Jeffery Senior Engineer	Caroline Braithwaite Principal Consultant	Angela Graham Associate	Angela Graham Associate

Revision History

Revision	Revision date	Details	Authorized	Name	Position
R01	28/09/2023	Initial Draft	02/10/2023	A Graham	Project Manager
R02	10/10/2023	Final Draft	11/10/2023	A Graham	Project Manager
R03	12/10/2023	Final Issued	12/10/2023	A Graham	Project Manager

Distribution List

# Hard Copies	PDF Required	Association / Company Name
	1	Neil Sumner / Biffa Waste Services Limited

Prepared for:

Biffa Waste Services Ltd

Prepared by:

Diane Jeffery
Senior Engineer
M: 07786 395693
E: diane.jeffery@aecom.com

AECOM Limited
6th Floor, 2 Charlotte Place
Southampton SO14 0TB
United Kingdom

T: +44 23 810 2180
aecom.com

© 2023 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1.	Report Context.....	5
1.1	Introduction.....	5
1.2	Proposed Facility.....	5
2.	Reason for the Application.....	6
2.1	Description of the Proposed Changes	6
2.2	Permit Conditions to be Modified.....	6
3.	Application Summary	8
3.1	The Operator.....	8
3.2	Existing Site Operations	9
3.3	Proposed Additional Treatment Processes	9
3.3.1	Crushing Process.....	9
3.3.2	OWC Process	9
3.4	Need for the Facility.....	10
3.5	Acceptance of Waste.....	10
3.6	The Site	11
3.6.1	Proposed Location	11
3.6.2	General Site Location	11
3.6.3	Site History	11
3.7	Management and Operational Control.....	11
3.8	Emissions Management	12
3.9	Odour Management.....	12
3.10	Dust Management.....	12
3.11	Noise Management	12
3.12	Impact Assessment	12
3.13	Assessment of Best Available Techniques.....	13
4.	Application Type.....	14
	Appendix A Proposed Changes to Permit Schedule 1, Table S1.1.....	15
	Appendix B EA Pre-Application Advice	18

Figures

No table of figures entries found.

Tables

Table 1 Permit EPR/AB3700LS – Conditions Requiring Modification.....	6
Table 2 Normal Waste Acceptance Hours	11

1. Report Context

1.1 Introduction

AECOM has been commissioned by Biffa Waste Services Limited (“the Operator” or Biffa) to prepare an application to develop a new Open Windrow Composting Facility (OWC) at Brookhurst Wood, Warnham, West Sussex. Given the locality of the new development on site, the new OWC will be added as an additional operation to the environmental permit (EPR/AB3700LS) for the Aggregate Treatment and Recycling Facility.

The new OWC facility is being developed to treat up to 60,000 tonnes per annum (tpa) of green waste and 30,000 tonnes per annum of wood waste.

This report is the Non-Technical Summary which has been prepared to support the permit application and the report should be read in conjunction with other supporting application information.

1.2 Proposed Facility

This application will vary the existing Aggregate Treatment and Recycling Facility (ATRF) operation with a new crushing operation and some additional waste codes will be added to the permitted waste list including mixtures of waste from the mechanical treatment of wastes that contain a high proportion of recoverable aggregate.

The proposed OWC facility will comprise new plant to facilitate the receipt, shredding and subsequent composting of green waste and the shredding of wood waste. Waste types accepted at the facility will be defined according to their List of Waste (LoW) Code and will generally consist of:

- wood waste;
- green waste;
- leaves;
- grass clippings; and
- horticulture type waste.

The facility will not receive or accept any waste covered by the Animal By-Product (Enforcement) (England) Regulations 2013 (ABPR).

The new plant will be designed to effectively shred the constituent parts of the incoming green waste, which is then transferred to open air windrows for composting and maturation. Green waste will be treated through the composting process while wood waste will only be shredded.

The intention is to produce a PAS 100 compliant product and as such it will be deemed to have reached end of waste criteria and has achieved product status. The product can be utilised for a wide range of beneficial after-uses including landfill restoration, community projects within West Sussex, use in domestic gardens and for agriculture.

2. Reason for the Application

2.1 Description of the Proposed Changes

The changes to the ATRF treatment processes include the addition of a new crushing operating which will be mobilised to site on a campaign basis. The description of the existing waste treatment operation will be updated to reflect inclusion of crushing in the limits of the activity. Additional waste codes will also be added to the existing permitted waste list for the ATRF.

The new OWC facility will be capable of processing up to 90,000 tonnes per annum, comprising 60,000 tonnes per annum of green waste to produce a PAS100 compost for use in local projects, and 30,000 tonnes per annum of wood waste for shredding/chipping.

This will support Government Policy adopted through the Resources and Waste Strategy (RWS) on moving towards the separate collection of food and garden waste nationally while continuing to ensure that garden wastes are diverted from landfill to reduce emissions. Open Windrow Composting is a suitable technology to meet the growing needs of Local Authority and commercial customers as more Local Authorities begin to commence separate garden waste collections.

The inclusion of the new OWC treatment facility will result in a new Schedule 1 activity being proposed as a variation to the existing ATRF permit (EPR/AB3700LS) as follows:

- S5.4 A(1)(b)(i) 'Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment.'
- Waste Operation – shredding, screening and separation of wood waste streams for recovery purposes.

Directly associated activities associated with the new OWC treatment processes to be included in the permit are expected to include:

- R13 - storage of incoming non-hazardous waste pending recycling/recovery/disposal;
- R3 - Recycling/reclamation of organic substances which are not used as solvents through a physical treatment process;
- R4 Recycling and recovery of metals and metal compounds;
- R13 – storage of the processed wood, finished compost and non-compost fractions;
- Process water collection and storage; and
- Surface water collection and storage.

The proposed waste streams to be handled by the new process are detailed in section 3.3 below.

Although this variation will introduce new discreet treatment processes, there are:

- No changes to site management and operational practices; and
- No other changes to current site ATRF processes.

2.2 Permit Conditions to be Modified

Site operations are currently regulated through an existing environmental permit (EPR/AB3700LS), and it is anticipated that the following permit conditions will need to be modified.

Table 1 Permit EPR/AB3700LS – Conditions Requiring Modification

Condition No	Subject	Anticipated Change
Status Log	Status	Updated to reflect this variation.
Signature Box	Issue date	Issue date to be updated for new variation.
Modify 2.3.3	Waste Acceptance	Modify condition to read: <i>"Waste shall only be accepted for treatment if:</i>

Condition No	Subject	Anticipated Change
		<p>a) <i>it is of a type and quantity listed in schedule 2, table S2.1 for Activity AR2 and AR3 or S2.2 or AR1 and S2.3 for AR4; and</i></p> <p>b) <i>it conforms to the description in the documentation supplied by the producer and holder.</i></p>
Modify Schedule 1	Table S1.1 Activities	Modify Table S1.1 to reflect the addition of the new processing activities, associated storage and treatment of process water. The proposed modifications are shown on the table in Appendix A and reflects the activities advised by the Environment Agency during pre-application discussion.
	Table S1.2 Operating Techniques	<p>The contents of this table should be modified to reflect the updating/addition of relevant documents as follows:</p> <ul style="list-style-type: none"> • Odour Management Plan dated Feb 2015 to be completely superseded by Odour Management Plan dated Oct 2023 (ref: 60684371-ACM-XX-00-RP-OWC-OMP-R03) submitted with this application. • Technical Plan V2 May 2015 remains valid for the existing ATRF activities and will be supplemented by the Technical Plan (ref: 60684371-ACM-XX-00-RP-OWC-TECH-R03) submitted with this application for the new OWC and crushing operations associated with the ATRF. • Site Management Plan V2 May 2015 to be completely superseded by Site Management Plan dated Oct 2023 (ref: 60684371-ACM-XX-00-RP-OWC-MMP-R03) submitted with this application. • Impact Assessment and associated fugitive risk assessment (May 2015) for the existing ATRF operations to be supplemented by the Impact Assessment Report and associated appendices dated Oct 2023 (ref: 60684371-ACM-XX-00-RP-OWC-IAR-R03) • The following documents we anticipate will be added: <ul style="list-style-type: none"> a) Fire Prevention Plan dated Oct 2023 (ref: 60684371-ACM-XX-00-RP-OWC-FPP-R03) b) Dust Management Plan dated Oct 2023 (ref: 60684371-ACM-XX-00-RP-OWC-DMP-R03) c) Noise Management Plan dated Oct 2023 (ref: 60684371-ACM-XX-00-RP-OWC-NMP-R03) d) Bio-aerosol Risk Assessment dated Oct 2023 (ref: 60684371-ACM-XX-00-RP-OWC-BIORA-R03)
Schedule 2	Waste Types	<p>Update existing Table S2.1 to include additional waste codes for the ATRF treatment processes.</p> <p>Add a new table S2.2 to reflect permitted green wastes accepted for treatment through new composting activity associated with the OWC process.</p> <p>Add a new table S2.3 to reflect permitted wood wastes accepted for processing through the new shredding and screening activities associated with the OWC process.</p> <p>The waste codes associated with all the processes are as defined in Appendix B, C and D of the Technical Plan (ref: 60684371-ACM-XX-00-RP-OWC-TECH-R03) submitted with this application.</p>
Schedule 7	Site Plan	Update with new site plan showing the extended installation boundary and new treatment process.

3. Application Summary

3.1 The Operator

With a history of leading the UK's waste management industry for over 100 years, today Biffa is an established enabler of the UK circular economy. It describes itself as the UK's leading sustainable management business, employing over 10,000 employees at a network of sites across the UK with 95% postcode coverage. The Company holds permits at 209 locations. The Group operates across the waste management value chain to support the UK circular economy including collection, recycling, treatment, processing and disposal of waste including the production and sale of recovered commodities such as energy, compost, paper, glass, metals and plastic.

Biffa was listed on the London Stock Exchange in October 2016 and entered the FTSE-250 in March 2020. In FY21, the Group's Statutory Revenue exceeded £1B. It is headquartered in High Wycombe, Buckinghamshire. In June 2022 the Company received a buyout proposal from Energy Capital Partners (ECP), this acquisition was completed on 27 January 2023, delisting the Company from the London Stock Exchange. ECP are a leading sustainability investor. They have a wealth of experience of UK and U.S. waste, environmental and sustainability markets. ECP will continue to invest in the business and accelerate the growth strategy in becoming the UK's leading sustainable waste management company.

Biffa's national customer base includes local authorities, large corporate entities, SMEs and purchasers of end-product commodities and energy, it carries out daily operations including collection, surplus redistribution, recycling, treatment, disposal and energy generation. Its strategic approach is based around circular economy and the waste hierarchy with a focus on "Reduce, Recycle and Recover" underpinned by collection. It is therefore structured in two operating divisions:

- Collections (this includes the Industrial & Commercial Division and Municipal Division)
- Resources & Energy

Biffa operates waste processing facilities across the UK. Biffa's infrastructure can process a wide variety of waste types including paper, plastic, metal, wood, glass, food, soil, aggregates, textiles, Waste WEEE and hazardous waste. Our priority is to reuse and recycle materials wherever possible, followed by recovery and finally landfill. Our current portfolio in excess of 100 depots and 76 waste processing facilities including but not limited to:

- MBT Facility at Brookhurstwood Landfill in West Sussex;
- Food recycling is achieved via food waste transfer at St Helens, Dewsbury, Cardiff and Edmonton followed by Anaerobic Digestion (AD) at Brookhurstwood, Poplars, Walpole and Wanlip;
- Plastic recycling is facilitated by mixed bottle sorting processes at Wigan, Aldridge and Grangemouth with state-of-the-art plastic recycling taking place at Redcar and Seaham;
- Materials Recycling Facilities are located at Aldridge, Edmonton, Ford, Ipswich, Liskeard, Milton Keynes, Plymouth, Corby and Priorswood. A specialist polishing facility at Derby;
- Green waste recovery through in-vessel composting at Etwell and Ufton or via windrow composting at Kilsby, Skelton Grange, Walpole, Dimmer, Priorswood and Meece;
- Aggregate Treatment and Recycling Plants at Brookhurstwood Landfill in West Sussex and Meece Landfill in Staffordshire, both of which use as material washing process;
- Five Soil Treatment Facilities (STF) using biological treatment at Redhill Landfill Site in Surrey, Westmill, Meece, Skelton Grange and Trecatti;
- Specialist services for the collection and treatment of hazardous waste, bulk liquid tankering, industrial cleaning and secure product destruction at our Secure Waste Recycling Facilities (SWaRf).
- Asbestos picking station at Redhill Landfill Site in Surrey; and
- A network of transfer stations across the UK.

In addition to the above, Biffa is one of the UK's largest producers of Refuse Derived Fuel (RDF), delivering more than 2,000 tonnes of RDF to energy recovery facilities every day. Transported by sea

from multiple ports and in vehicles, the RDF is delivered to facilities throughout the UK, and to selected partners from the Netherlands, Germany, and Sweden.

3.2 Existing Site Operations

The existing ATRF facility is designed to process a maximum of 25 tonnes per hour and accepts up to an annual throughput of 60,000 tonnes waste for treatment and recovery.

Materials are received into a reception storage bay prior to being loaded into the processing plant. From the point that the waste is loaded into the intake hopper, the recycling plant operates as a closed system under normal operation, with no further handling of the material until output products are deposited in the relevant storage bays.

The main plant stages include:

- Reception hopper;
- Trommel pre-screen and feeder system;
- Feed conveyor;
- Ferrous metal recovery using an overband magnet;
- Attrition System comprising a wash/scrub station, screens and a hydrocyclone;
- Product conveyors and output storage bays; and
- A water treatment system.

Water from the scrubbing and dewatering process is cleaned and recycled within the system.

The outputs from the plant are the products from the recycling process which include sand, aggregate, metals, organic materials and silts from the centrifuge system. The aggregate materials and sands are sampled in accordance with an EoW protocol and are generally classified as product.

No changes are proposed to the existing ATRF process operations – the variation will aim to add new additional, separate treatment processes as outlined in section 3.3 below.

3.3 Proposed Additional Treatment Processes

3.3.1 Crushing Process

It is proposed to import and operate a mobile crushing unit on a campaign basis at the ATRF area of the site. This will be used to deal with oversize materials and waste streams which require size reduction only.

3.3.2 OWC Process

The proposed facility will comprise new plant to facilitate the receipt, shredding and subsequent composting of green waste. Waste types accepted at the facility will be defined according to their European Catalogue Waste Code and will generally consist of:

- wood waste;
- green waste;
- leaves;
- grass clippings; and
- horticulture type waste.

The facility will not receive or accept any waste covered by the Animal By-Product (Enforcement) (England) Regulations 2013 (ABPR). The intention is to produce a PAS 100 compliant compost from the inputs. A full list of waste codes are presented in Appendix C and D of the Technical Plan.

The new plant will be designed to effectively shred the constituent parts of the incoming waste, which is then transferred to open air windrows for composting and maturation. Wood waste is not processed or treated via the windrows.

The final outputs of the composting process from green waste should meet PAS100 standards and as such it will be deemed to have reached end of waste criteria and is therefore no longer subject to waste regulatory controls as it has achieved product status. The product can be utilised for a wide range of beneficial after-uses including landfill restoration, community projects within West Sussex, use in domestic gardens and for agriculture.

The individual elements of the proposed new process activities are described further in the Technical Plan (reference 60684371-ACM-XX-00-RP-OWC-TECH-R03) in Application Part 4.

Vehicles associated with the OWC will utilise the existing access/egress with Langhurstwood Road, and existing main access road around site until they enter the ATRF and OWC areas through a new access point at the southwest corner of revised site layout. A new weighbridge and associated office will also be installed as part of the variation. The revised installation boundary and other relevant features are shown on drawing reference BA235900, which is attached in Part 13 of the Application.

3.4 Need for the Facility

In September 2021 Biffa acquired Viridor's collections business and certain recycling assets. The acquisition brought a large and successful organics collections and processing business within Biffa's portfolio which Biffa is seeking to grow further. This acquisition included West Sussex County Council's green waste collections. Consequently, the applicant is developing proposals to relocate green waste recycling operations to the Waste Treatment Facility at Brookhurst Wood. This provides an excellent opportunity to provide composting facilities with close proximity to strategic transport links for green waste arising from both West Sussex and numerous adjoining authorities who are currently tendering for green waste collection contracts.

The new OWC facility which is situated in a rural location with excellent access to markets for compost will be capable of processing up to 90,000 tonnes per annum, comprising 60,000 tonnes per annum of green waste to produce a PAS100 compost for use in local projects, and 30,000 tonnes per annum of wood waste for shredding/chipping.

This will support Government Policy adopted through the Resources and Waste Strategy (RWS) on moving towards the separate collection of food and garden waste nationally while continuing to ensure that garden wastes are diverted from landfill to reduce emissions. Open Windrow Composting is a suitable technology to meet the growing needs of Local Authority and commercial customers as more Local Authorities begin to commence separate garden waste collections.

There is also local demand for high quality PAS100 grade produced from open windrow composting processes from the local agricultural, horticultural and landscaping industries. This provides a number of benefits:

Providing facilities to fully maximise the value from green waste as a resource is fully consistent with Circular Economy objectives, since the process will produce a viable product thereby reducing the demand for scarce natural resources. This is particularly important at a time when the UK is moving towards net-zero carbon emissions and following the outcomes of COP26.

Production of high quality PAS100 product that provides a peat-free organic commodity in advance of a ban on using peat anticipated to come into force in the near future.

3.5 Acceptance of Waste

Some additional waste codes are proposed to be added to list of wastes specified in Table S2.1 of the environmental permit (EPR/AB3700LS) for the existing ATRF facility. The revised list is presented at Appendix B of the Technical Plan (Application Part 4, reference 60684371-ACM-XX-00-RP-OWC-TECH-R03).

The new OWC operations will require additional waste types to be accepted such as wood waste, green waste, leaves, grass clippings and horticulture type waste which fall under the LoW codes shown in

Appendix C and D of the Technical Plan (Application Part 4, reference 60684371-ACM-XX-00-RP-OWC-TECH-R03).

The proposed new processes will receive waste during the existing operating periods as identified below.

Table 2 Normal Waste Acceptance Hours

Day of the week	Opening Hours
Monday to Saturday:	07:00 to 18:00
Sunday:	Closed for deliveries
Public Holidays:	07:00 to 10:00

It is recognised, however, that in emergency situations, waste may need to be accepted outside the above time periods (e.g. in response to a request from WSCC or EA under Civil Contingencies Act 2004 obligations or similar). Waste accepted during these periods will be received and managed in line with standard plant waste acceptance and operating procedures.

3.6 The Site

3.6.1 Proposed Location

It is proposed to site the new OWC processing areas and associated plant adjacent to south and eastern boundaries of the existing ATRF facility operated by Biffa, and to the south of the Brookhurst Wood Landfill site. The area currently consists of hardstanding used for the stockpiling of outputs from the ATRF prior to export.

The revised installation boundary is shown on Drawing BA235900 and this includes the additional area required for siting and operating the additional treatment process. Details regarding the condition of the additional area being added to the installation boundary is provided in the Site Condition and Baseline Report (60684371-ACM-XX-00-RP-OWC-SCR-R03 Application Part 12) and relevant plans and drawings are provided in Application Part 13.

3.6.2 General Site Location

The overall site is located approximately 4 kilometres to the north of Horsham as shown on Drawing BA0312600(Application Part 13). The village of Warnham is 1.5km to the southwest and Kingsfold is 2km to the north. The centre of the overall site is located at grid reference National Grid Reference (NGR) E 517099, N134700 at Brookhurst Wood, Langhurstwood, Horsham, West Sussex.

The setting is regarded as predominantly rural with:

- a scattering of farmhouses and other isolated dwellings to the west;
- a former residential property, known as 'Greylands' (now an office) to the east;
- Broadlands Business Park to the north; and
- Warnham Brickworks and Warnham railway station to the south.

3.6.3 Site History

The area has an extensive planning history, with mineral uses, including clay extraction and processing, and brick manufacture, dating back more than 100 years.

Specific details of the historical land use are provided in the Site Condition and Baseline Report (60684371-ACM-XX-00-RP-OWC-SCR-R03 Application Part 12).

3.7 Management and Operational Control

The existing ATRF is operated by Biffa Waste Services Ltd, and an integrated management system (IMS) has been implemented at the site. The IMS is certified against BS EN ISO standards for environment, quality and safety and the current site certificates for each standard is attached in the Site Management Plan, Appendix C (60684371-ACM-XX-00-RP-OWC-MMP-R03, Application Part 3).

The system defines operational and maintenance procedures, coupled with requirements to be met in the event of an accident or incident. The site management techniques including training and development which are used are detailed in the updated Site Management Plan (60684371-ACM-XX-00-RP-OWC-MMP-R03 in Application Part 3).

3.8 Emissions Management

There are no point source releases to either air or water associated with the new OWC. Surface water from the site will be directed to a new contained drainage system (see Drawing BA0313400, Application Part 13) and will be reused as process water.

Emissions management at the facility will be achieved by:

- Good housekeeping standards;
- Use of partially enclosed waste reception bays;
- Use of enclosed processing plant and equipment;
- General operational control;
- Operator training and awareness; and
- Plant maintenance.

Site operational emissions management techniques are summarised in the management plans in Appendix A of the Impact Assessment (60684371-ACM-XX-00-RP-OWC-IAR-R03 Application Part 9). Specific management plans for odour, dust and noise are detailed below.

3.9 Odour Management

An updated Odour Management Plan (OMP) has been prepared to detail the operational control, maintenance and monitoring requirements that will be implemented for odour control at the site. The updated OMP (reference 60684371-ACM-XX-00-RP-OWC-OMP-R03) covers the existing ATRF as well as the proposed new OWC processes and is provided in Application Part 5.

3.10 Dust Management

As the new process has the potential to generate dust as fugitive releases, in line with EA Guidance a Dust Emission Management Plan (DEMP) has been prepared to detail the operational control, maintenance and monitoring requirements that will be implemented for dust and fugitive release control at the site. The DEMP (reference 60684371-ACM-XX-00-RP-OWC-DEMP-R03) covers the existing ATRF as well as the proposed new OWC and is provided in Application Part 6.

3.11 Noise Management

As the nature of the new process includes new processing plant with a range of motors and drives a Noise and Vibration Management Plan (NMP) has been prepared in accordance with EA guidance. The NMP details the operational control, maintenance and monitoring requirements that will be implemented for control of noise and vibration at the site. The NMP (reference 60684371-ACM-XX-00-RP-OWC-NMP-R03) covers the existing ATRF as well as the proposed new OWC and is provided in Application Part 7.

The proposed additional OWC is not anticipated to generate significant noise levels as demonstrated through a noise assessment which was completed in accordance with BS 4142: 2014. This is attached as Appendix D to the Impact Assessment Report (60684371-ACM-XX-00-RP-OWC-IAR-R03 Application Part 9).

3.12 Impact Assessment

An assessment of the environmental impact associated with the site activities was completed and is presented in Application Part 9.

The assessment shows that:

- There were no anticipated significant environmental impact issues associated with site activities;
and
- There were no anticipated human health impacts associated with the site activities.

3.13 Assessment of Best Available Techniques

The proposed additional processes have been assessed as meeting the relevant requirements of the Environment Agency guidance in:

- EA Guidance “Non-hazardous and inert waste: appropriate measures for permitted facilities” (August 2023);
- EA Guidance “Biological Treatment: Appropriate Measures for Permitted Facilities” (July 2023);
- EU “BREF Note for Waste Treatment” and the associated “BAT Conclusions” document (2018);
and
- Process Guidance Note 3/16(12) Statutory guidance for mobile crushing and screening.

The BAT assessment (60684371-ACM-XX-00-RP-OWC-BAT-R03) is presented in Application Part 11.

4. Application Type

This application is for a variation to the existing Environmental Permit (EPR/AB3700LS) to add an Open Windrow Composting process to the facility with the addition of a crushing operation and additional waste codes for the ATRF. The application is made under the Environmental Permitting (England and Wales) Regulations 2016, as amended and has been prepared as a bespoke application.

The Operator has completed an enhanced pre-application consultation process with the Environment Agency which has informed the final format and content of this application. A copy of the pre-application advice is attached at Appendix B for information.

Appendix A Proposed Changes to Permit Schedule 1, Table S1.1

Activity Reference	WFD Annex I and II Operations (where applicable)	Activity Listed in Schedule 1 of the EP Regulations	Description of Specified Activity	Limits of Specified Activity
INSTALLATIONS				
AR1	R3 Recycling/Reclamation of organic materials not used as solvents.	S5.4 A(1)(b)(i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tpd involving biological treatment.	Open windrow composting facility (OWC)	Open windrow composting facility (OWC) Activity is limited to: a. Treatment of waste by composting. b. Sanitization, stabilization, and maturation. c. Physical treatment of waste, restricted to storage, sorting, shredding, blending, and screening. Managing storage of feedstock prior to windrow formation to prevent anaerobic conditions. .Waste types specified in Table S2.2.
WASTE OPERATIONS				
AR2	R3 Recycling/Reclamation of organic materials not used as solvents. R4 Recycling/Recovery of metals and metal compounds R5 Recycling/Reclamation of other inorganic materials R13 Storage of wastes pending any of the operations numbered R1 to R12.	Not Applicable	Aggregate Treatment and Recovery Facility (ATRF)	Treatment consisting of sorting, screening, separation, washing and dewatering of waste into different components for recovery. All incoming waste shall be stored and treated on an impermeable surface with a sealed drainage system. Wastes shall be stored for no longer than 3 years prior to recovery. Waste types specified in Table S2.1.
AR3	R5 Recycling/Reclamation of other inorganic materials	Not applicable	Crushing of hazardous oversize fraction prior to further treatment for recovery/disposal	Treatment and/or recovery of waste materials through an enclosed mechanical crushing process. .Waste types specified in Table S 2.1
AR4	R3 Recycling/Reclamation of organic materials not used as solvents	Not applicable	Shredding and screening of wood waste streams	Treatment and/or recovery of wood waste materials through the shredding, screening and separation aspects of the OWC operations. .Waste types specified in Table S 2.3
DIRECTLY ASSOCIATED ACTIVITIES				

Activity Reference	WFD Annex I and II Operations (where applicable)	Activity Listed in Schedule 1 of the EP Regulations	Description of Specified Activity	Limits of Specified Activity
AR5	R3 Recycling/Reclamation of organic materials not used as solvents.	Not applicable	Recycling/reclamation of organic substances which are not used as solvents.	Waste types specified in Table S2.1, S2.2 and S2.3.
AR6	R3 Recycling/Reclamation of metals and metal compounds.	Not applicable	Recycling/reclamation of metals and metal compounds.	Waste types specified in Table S2.1, and S2.2.
AR7	R5 Recycling/Reclamation of inorganic materials.	Not applicable	Recycling/reclamation of other inorganic materials	Waste types specified in Table S2.1 and S2.2.
AR8	R13 Storage of wastes pending any of the operations numbered R1 to R12. D15 Storage pending any of the operations numbered D1 to D14	Not applicable	Temporary storage of non-hazardous waste prior to treatment.	All storage must take place on an impermeable surface with sealed drainage. Waste only as per tables S2.1 S2.2 and S2.3.
AR9	Treatment Output Storage	Not applicable	Post-treatment storage of non-hazardous outputs.	Storage of recovered materials, products and residues following completion of treatment
AR9	Process Water - ATRF	Not applicable	ATRF water treatment which will treat the waste process water to facilitate recirculation.	Management and treatment plant of process water to facilitate recirculation in ATRF.
A10	Process Water - OWC	Not applicable	OWC run off collection and recirculation as process water.	Management and treatment plant of process water to facilitate recirculation in OWC.
AR11	Surface Water Collection	Not applicable	Collection and storage of surface water prior to use or discharge.	Surface water collection and storage within onsite lagoons and tanks.

Appendix B EA Pre-Application Advice

Caroline Braithwaite
Biffa Waste Services
Langhurst Wood Road
Horsham
West Sussex, RH12 4QD

Our reference: EPR/AB3700LS/V006
EAWML 400796
Date: 06 July 2023

Dear Caroline

Pre application advice – Enhanced service
Site: Brookhurst Wood – Aggregate Treatment and Recycling Facility

I am pleased to provide you with your enhanced level of pre-application advice. This advice is based on the information provided on your pre application advice form and scoping report provided.

What enhanced pre application covers

Further information on the enhanced pre-application service is detailed on section 2 of the [Environmental permitting charges guidance on GOV.UK](#).

As part of this service we have provided you with the following information:

Application reference number	EA/EPR/AB3700LS/V006
Habitats screening	Habitats screening report (Pre-application Enhanced Conservation Screening Report and Maps 01062023)
Documents attached	Appendix 1 – enhanced pre-application response Appendix 2 - Installations basic general pre-application advice Appendix 3 - Supplementary biological treatment basic pre-application advice

A complete application must contain the following information below:

Declaration	Please ensure the declaration section is completed by each relevant person. For a limited company, this must be a director/company secretary as listed on Companies House.
Site Plan	Site plan must be clearly marked with the full site boundary

customer service line 03706 506 506 floodline 03459 88 11 88
incident hotline 0800 80 70 60

Declaration	Please ensure the declaration section is completed by each relevant person. For a limited company, this must be a director/company secretary as listed on Companies House.
Payment	Please note your application will not be processed until we receive the full payment.

What happens next?

If you submit an environmental permit application then please quote this pre-application reference number: EA/EPR/AB3700LS/V006.

If the advice above details using the [online digital application form](#), your application can be submitted using this method. If not, please send your completed application documents via email to:

psc@environment-agency.gov.uk

Please email applications where possible. If email is not possible you can submit by post to:

Environment Agency, Permitting Support Centre, Quadrant 2, 99 Parkway Avenue, Sheffield, S9 4WF

Current application timescales

Our current queues are large and we are taking longer than usual to allocate work for initial assessment, known as duly making. The table below shows our estimated queue times by application type. Please note, this is based on our average times and some applications may be picked up before or after the timescales listed below.

Application type	Estimated time to allocation
New bespoke	30-32 weeks
New standard rules	30-32 weeks
Admin variation	2-6 weeks
Minor variation	12-16 weeks
Normal variation	30-32 weeks
Substantial variation	30-32 weeks
Transfer	10-14 weeks
Surrender	9-13 weeks
Medium Combustion Plant	10-14 weeks

Disclaimer

customer service line **03706 506 506**

floodline **03459 88 11 88**

incident hotline **0800 80 70 60**

The advice given is based on the information you have provided, and does not constitute a formal response or decision of the Environment Agency with regard to future permit applications. Any views or opinions expressed are without prejudice to the Environment Agency's formal consideration of any application. Please note that any application is subject to duly making and then full technical checks during determination, and additional information may be required based on your detailed submission and site specific requirements and the advice given is to address the specific pre-application request.

This advice covers installations activities only.

Other permissions from the Environment Agency and/or other bodies may be required for associated or other activities.

Enhanced pre application cost estimate

At this stage the pre-application advice is expected to cost up to £600 plus VAT. An invoice will be sent separately at a later date.

This pre-application request is now closed.

We consider this pre application request is now closed however if you have any questions regarding this letter please contact Ruth Giles at ruth.giles@environment-agency.gov.uk.

If you require additional enhanced pre-application advice please complete our [online form](#).

We look forward to working with you on this project.

If you have any questions please call 03708 506 506.

Yours sincerely

Ruth Giles

Appendix 1 – EPR/AB3700LS/V006 Enhanced Preapplication Response

For background : Proposed open windrow composting (OWC) activity that will be above threshold, and hence a scheduled activity. Proposed site location is adjacent to a permitted waste operation, an aggregate treatment and recycling facility (ATRF) primarily for the reception, treatment and transfer of street cleaning residues or gully waste. The output includes aggregate, metals, organic materials and silts. The aggregate and sand are sold, the organic matter goes to landfill.

Please see preapplication queries (in BOLD) and responses given below:

QN 1: Schedule 1 activities being proposed are:

S5.4 A(1)(b)(i) - Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment.

Directly associated activities are expected to include:

- **R13 - storage of incoming non-hazardous waste pending recycling/recovery/disposal;**
- **R3 - Recycling/reclamation of organic substances which are not used as solvents through a physical treatment process;**
- **R13 – storage of the finished compost and non-compost fractions;**
- **Process water collection and storage; and**
- **Surface water collection and storage.**

We believe that a variation to the existing ATRF permit (EPR/AB3700LS) to add the above activities offers the best flexibility, however, as part of the pre-application response we wish to confirm this and to understand any barriers to achieving a variation versus applying for a standalone bespoke permit for the OWC.

Both a variation to the existing permit or applying for a new bespoke permit are options available to you. If you decided to apply for a standalone bespoke permit for the composting activity you would also need to consider any change/variation you would need to make to the existing ATRF permit if the activities of both permits are carried on the same envelope of land, thus ensuring regulatory clarity. In either case the fee would be the same i.e.:

For a new bespoke permit application Section 5.4 (a)(i) and (b)(i) - non-hazardous waste installation – biological treatment (charging ref. 1.16.2.1) the fee is £13,984.

The change for adding a listed activity to your existing permit is the same as for a new permit application for that type of activity (hence the same fee) and it would be considered a substantial variation.

There are likely to be additional fees for supporting plans (please refer to Appendix 2 - Installations basic general pre-application advice and Appendix 3 - Supplementary biological treatment basic pre-application advice for more information).

QN 2: Are the proposed list of activities and DAAs correct and confirm if more than one Schedule 1 activity would be required to cover non-PAS compliant outputs. We would also need to understand if more than one Schedule activity would be required to cover PAS 100 outputs and potential non-PAS outputs.

The directly associated activities (DAAs) need to be specific to the proposed scheduled activity, but the DAAs suggested reflect likely DAAs for an open windrow composting site. The standard rules SR2021 No. 1 for open composting at installations would be useful for reference.

You would not need a separate listed scheduled activity for non-PAS outputs *provided* these are incidental to the process (i.e. the process aim is to achieve PAS compliant outputs, as stated in your scoping report).

QN 3: It should be noted that the list of proposed wastes currently includes a 19 12 12 organic output from the ATRF facility. As the intention is to produce a PAS 100 compliant compost as an output from the OWC as part of the pre-application response we would like to confirm that acceptance and treatment of the proposed 19 12 12 code would meet the requirements for PAS 100 since the standard itself does not list acceptable waste codes.

For the composting quality protocol, input materials are required to be biodegradable materials that have been separately collected from non-biodegradables and which have not been mixed, combined or contaminated with other potentially polluting wastes, products or materials. Therefore, input from the ATRF would not meet the standard.

QN4: In terms of managing the outputs we are considering:

- **Sending any stone outputs from compost screening activities for washing through the ATRF for conversion to a product**
- **Blending the ATRF sand product with the compost output but we would need to confirm if there are any implications for PAS 100 certification/end of waste status for the blended product.**

The aim of the Quality Protocol is to produce a compost product that has quality assurance and hence consumer confidence. It is counter intuitive to then mix/blend it with something else, and it would no longer be PAS 100 compliant.

End of waste guidance can be found [here](#).

QN5: We are also considering relocating the ATRF sand and stone product storage bays to an area within the new compost storage and screening area. If the application was progressed as a standalone bespoke permit would the storage of product (i.e.no longer a waste) present any permit regulation issues

Providing a material was not a waste, and the storage was not causing environmental pollution, it would not come under permitting regulations. Waste and non-waste would have to be clearly separated.

QN6: The general principle of drainage for the new OWC composting area will be to resurface the area with concrete laid with falls to a new perimeter drainage system. Incident rainfall and leachate will drain into the lined perimeter drainage system, which in turn will drain to one of two surface water lagoons with the excess being pumped to a new water storage tank to the north– this water will be reused as irrigation water for the windrows.

Options being considered for surface water management include:

- a) Diverting the current surface water discharge into Bolding Brook at Culvert C from the ATRF to the clean side of the compost operation for windrow irrigation/use in the ATRF.**
- b) Discharging surface water from the new OWC East West Road into Boldings Brook via Culvert B.**

c) Installing rainwater harvesting on the compost screening building and direct it for use in the ATRF process.

d) Redirect the foul water from the ATRF area to one of the new surface water lagoons at the compost area for use as windrow irrigation water.

Clarification is being sought from the pre-application process on whether the above options are acceptable in principle and any criteria which would need to be applied to facilitate discharge to Boldings Brook as well as reuse of the water in the compost process.

Any primary and secondary containment will need to comply with CIRIA 736 or equivalent industry standard.

We cannot predetermine an application so can only give general advice. Options for surface water management would have to go through a full options appraisal, taking into account relevant guidance. For example, BAT19(f) Waste Treatment BREF/BAT conclusions recommends segregation of water streams, e.g. clean surface water from process water.

But generally, in response to proposals a to d:

- a) clean, uncontaminated water can be used for irrigation of compost
- b) clean surface water from roofs, or from areas of the site that are not being used in connection with storing and treating waste can be discharged directly to surface waters, or to groundwater by seepage through the soil via a soakaway. This doesn't preclude other permissions you may need to consider such as Land Drainage consents
- c) measures to make good use of water resources are encouraged
- d) there is a risk of chemical contamination using ATRF washings on the compost and the material wouldn't be considered PAS compliant.

QN7: Although the intention is that leachate and contaminated run-off water will be reused to irrigate windrows where possible, it is proposed that any remaining leachate will be dealt with by one of the following options.

a) Export to the adjacent landfill where it will be accepted for treatment by the existing Leachate Treatment Plant (LTP) for treatment prior to discharge to foul sewer – we believe this would need a minor variation of the LTP permit to add the appropriate waste code;

b) Pump from OWC area to the LTP discharge pipe without treatment for discharge to foul sewer at a different time to the LTP discharge – OWC leachate would be kept separate from LTP output and be subject to its own monitoring and discharge limits;

c) Tankered off site for treatment or as use as an organic fertiliser – the intention is that this option would be used in the early stages of operation as the OWC facility was being established and under emergency conditions when the option to discharge via one of the other 2 routes is not available (e.g. during maintenance).

The Operator's preference would be option b, however as part of the pre-application process, the Operator would like to understand the regulatory viewpoint of each option to facilitate finalisation of the route.

As above, the proposals would need a full options appraisal, taking into account relevant guidance. We cannot predetermine an application so can only give general advice. But generally, in response to options a to c:

- a) subject to full appraisal this would appear a potential option
- b) subject to full appraisal this would appear a potential option. If your application will include water quality discharges which form part of the same installation facility you must complete the installation application forms and water quality application forms.

- c) you would need to consider relevant legislation and controls i.e. tankered waste going a suitably licenced site, or if used on land complying with a landspreading permit, guidance found [here](#).

QN8: The required standards that the EA require the BAT assessment to be completed against and highlighting of any particular areas of concern from the information provided at this stage. We understand that SGN S5.06 has been superseded by the new 'Appropriate Measures Guidance for Biological Treatment' but would like this confirmed

Please refer to the Technical Description and BAT Assessment section of the attached Appendix 3 - *Supplementary biological treatment basic pre-application advice*. There is overlap between best available techniques (BAT) for waste installations and necessary measures for waste operations. The Environment Agency uses the term 'appropriate measures' to cover both sets of requirements. The guidance for biological treatment appropriate measures can be found [here](#). Where the biological treatment is directly connected or associated with another regulated activity or process, specific technical guidance may also apply such as S5.06 recovery and disposal of hazardous and non-hazardous waste. You would also need to have regard to any relevant horizontal/cross sector guidance.

QN9: Provision of the normal heritage and nature screen for the permit application.

Please refer to Habitats Screening Report attached.

QN10: Confirm if the installation boundary needs to extend to include the new surface water storage tank

It would be considered a directly associated activity, as shown below

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
ARX	Surface water collection and storage	Collection and storage of uncontaminated roof and site surface water in xx storage tank(s) or xx lagoon(s).	From the collection of uncontaminated roof and site surface water from non-operational areas only to re-use within the facility or discharge off-site.

QN11: To confirm that water/leachate can be used as water for suppression purposes in the event of a fire occurring on the site

Provided the water can be contained following use in a fire this would be a possibility. Please see our Fire Prevention guidance found [here](#).

QN12: SR 2021 No 1 excludes materials with contaminants >1% w/w, however many LPA contracts indicate acceptance up to 2 - 3% w/w. Is it possible to accept materials with higher percentage contaminants under the permit as long as we meet the PAS 100 criteria for the quality of the output (i.e overall contaminants 2mm with plastic contaminants being <0.25%)

The expectation is that plastic waste will be incidental only for green waste, and hence our criteria of *biodegradable wastes that is significantly contaminated with non-compostable or digestible contaminants, in particular plastic and litter shall be no more than 1% w/w and shall be as low as reasonably practicable by 31 December 2025*.

Any deviation from this would have to be fully justified, including a demonstration of how any plastic contamination will be removed prior to processing.

Appendix 2 - Installations basic general pre-application advice

Check if you need an environmental permit

If you are unsure whether your activity requires an environmental permit or what kind of permit you require, you should read our [guidance on whether you need an environmental permit](#).

How do I apply for a new permit?

To apply for a new permit, you must complete the relevant application forms and provide the required supporting information.

For some operations you can apply for a [standard rules](#) environmental permit. These have fixed conditions and are only suitable for a limited number of activities and locations. For all other activities and locations, you need to apply for a bespoke permit.

Standard rules:

- [Apply for a new standard rules online](#)
- You can also use the [application forms for a new standard rules permit](#). You need to email the completed forms, along with supporting documentation, to psc@environment-agency.gov.uk

Bespoke permit:

- To apply for a bespoke installation permit you must complete application forms A, B2, B3 and F1.
- You will also need to complete application form part B6 if your installation includes a point source emission(s) to water, groundwater or sewer.

You should read the guidance notes that accompany each form. You should download the application forms and open with an Adobe Acrobat Reader. You may not be able to complete the form using other pdf readers, such as the one built into your internet browser.

[Application forms and guidance for a bespoke permit application.](#)

You need to email the completed forms, along with supporting documentation, to psc@environment-agency.gov.uk

How do I change, transfer or cancel my permit?

If you already have a permit, and want to change (vary) it, transfer it to another person or business, or surrender it, you must provide the correct forms and supporting information.

[How to change details of your environmental permit, transfer it to somebody else or surrender it.](#)

If you are considering carrying out research or trials read [Waste operations and A1 installations: carrying out research or trials](#). You may not need to apply to vary your permit when you carry out research activity or trials if you follow this guidance.

How much will my permit cost?

Before applying, you should read the [Environmental permitting charges guidance](#). This sets out how to calculate the relevant charge and when certain charges apply.

Baseline charge

You can find a full list of activity charges in table 1 in the tables of charges in the [Environmental permitting charging scheme](#). The baseline charge for an application covers the work the Environment Agency carries out each time they determine a typical permit application.

There are fixed baseline charges for new applications, variations to permits, transfer applications and surrender applications.

Add-on charges

You may have to pay an add-on assessment charge for the assessment of plans, for example an odour management plan.

If we need to carry out additional assessments, for example a habitats assessment, we may charge extra for this work.

You must pay the add-on charge when applying for a new permit or if you need to submit a new plan when applying for a permit variation.

In some cases the costs of assessing these plans is included in the baseline application charge. The activity description in table 1 in the tables of charges will say if this is the case.

The plans and assessments are listed in table 1.19 in the tables of charges in the charging scheme.

Habitats assessment

For certain protected sites we need to carry out a habitats assessment. For these sites we charge a fixed amount of £779.

This is an assessment of the risks to one or more of these sites, a:

- European Site within the meaning of the Conservation of Habitats and Species Regulations 2017
- site referred to in the National Planning Policy Framework 2018 as requiring the same assessment as a European Site
- site of special scientific interest within the meaning of the Wildlife and Countryside Act 1981
- marine conservation zone within the meaning of the Marine and Coastal Access Act 2009

We have included further information on when this is required in the supporting documents section below.

Subsistence

If we grant a permit, you will need to pay an annual subsistence charge to cover the ongoing costs of regulating the permit. The subsistence charges are listed in the tables of charges in Part 3 of the charging scheme.

Sites of High Public Interest (SHPI)

If your site is designated as a SHPI a different charging processes is applied. Additional information on SHPI is included in [section 2.5 of the Environmental Permitting Charges Guidance](#).

- An application for a SHPI is subject to a newspaper advertising charge of £500.
- The number of hours it takes to determine the application will be calculated at £100 per hour (commonly referred to as a ‘time and materials’ charge). If this is higher than the standard application charge listed in the Charging Scheme, the additional charge component will be applied – please see [section 2.5 of the Environmental Permitting Charges Guidance](#).

Declaration

Please ensure the Declaration section is completed by each “relevant person”.

- For an application from an individual, a relevant person is the person to be named on the permit.
- For an application from more than one individual, each person who is applying for their name to be on the permit must complete the declaration – you will

have to complete a separate copy of the declaration page for each additional individual.

- In the case of a company a relevant person must be an active director/company secretary as listed on [Companies House](#).
- For a limited liability partnership, the declaration must be completed by a partner.
- For a charity, a relevant person is a key post holder: chair, chief executive, director or trustee.

Further information on who should complete the declaration can be found in section 5 of the [guidance notes for the F1 application form](#).

Supporting documents

You need to supply supporting documents with your application. The online guidance and application form guidance explain what documents you need to provide.

Depending on the type of application, you might not be required to provide all the documents listed below.

If you do not provide the correct supporting information this may delay the processing your application.

We will check your application to make sure it is complete. We refer to these checks as 'duly making'. This is to ensure we have enough information to start to determine your permit application. We will contact you if information is missing.

If we cannot progress your application past this stage for any reason, we will return it and refund the application charge minus 20% to cover our costs to that point.

We will not charge this if we return an application after having done very little work – for example, because it contained obvious errors or omissions.

The amount we will keep is capped at £1,500.

Once we have duly made an application we will start to determine it. This is when we do our technical checks. We may need to ask you for further information or additional documents at this stage.

Non-Technical Summary

For new bespoke permits and most variation applications you need to send us a simple explanation of your proposed activities (or in the case of a variation, what changes you propose to make). This should include a summary of your operations and a summary of the key technical standards and control measures arising from your risk assessment.

As a guide, this summary document should be no more than one to two pages in length.

Site plan

New installations applications require a site plan. It is also required when you propose to increase or reduce your site boundary.

The plan must clearly show the full site boundary in a single unbroken line. For standard rules permits, the boundary must be in green.

Your plan should clearly mark the site layout, infrastructure and drainage arrangements.

Environmental Management System

For new bespoke permit applications and transfer applications you must send a summary of your environmental management system (EMS). An update to your EMS may also be required for some variation applications. You should follow the [guidance on developing a management system](#).

Habitats risk assessment

You should check if your site is located within the relevant screening distance of a designated site. If so, you need to assess the risk to the site(s) from your activity. You may need to pay an additional charge to cover the assessment of the risk. Further information is included in the 'How much will my permit cost' section above.

To help you identify relevant sites, you can ask us to complete a Nature and Heritage Conservation Screening assessment for you, using the [online pre-application service](#). The screening assessment service is free of charge.

If you are applying for a variation and emissions or impacts are increasing as a result of that change then depending on the location of the facility you may need to assess how the increased impact will affect habitat sites.

Environmental Risk Assessment

For new applications or when you make changes, you must consider the environmental risk posed by your proposals. This must take the form of an environmental risk assessment which should follow the methodology set out in [risk assessments for your environmental permit](#).

You should read our guide to [risk assessments for specific activities](#) and consider using our assessment tool to evaluate your environmental risk. Our assessment tool will inform you when more detailed modelling is required.

You should [check if your site is located in a flood risk zone](#). If the site is in a flood zone, you should assess the risk of pollution in the event of a flood.

Depending on the outcome of your initial environmental assessment, you may be required to undertake detailed modelling of your environmental risk.

- If you need to assess the risk of emissions to air, use the [air emissions risk assessment for your environmental permit guidance](#).

You must carry out detailed modelling assessment on any emissions that you didn't screen out through your air emissions risk assessment. Your modelling report needs to follow the [air dispersion modelling reports guidance](#).

- If you need to assess the risk of hazardous pollutants to surface water, you need to follow the [surface water pollution risk assessment guidance](#).
- If you need to assess the risk from sanitary determinands you should follow the [assessment of sanitary and other pollutants in surface water discharges methodology](#).
- If you need to undertake detailed modelling of the risk to surface water you should follow the [surface water pollution risk assessment methodology](#).
- If you need to undertake an assessment of the risk to groundwater you should follow the [groundwater risk assessment guidance](#).

Technical Description and BAT assessment

For new permit applications, you will need to provide a technical description of the activity (or in the case of a variation, the changes you propose to make).

You need to detail the plant, equipment and infrastructure, including design capacities. You must demonstrate how you will meet any relevant [Best Available Techniques \(Including compliance with BAT conclusions where these have been published for your activity\)](#). This should include consideration for any relevant Directives, such as Medium Combustion Plant Directive (MCPD), Energy Efficiency Directive and Waste Framework Directive (WFD).

The technical assessment should also include details of your operating techniques and the infrastructure you are using to minimise the risk of pollution, including any details of secondary containment used (such as bunds) and how this meets any relevant standards. Please see the [pollution prevention guidance](#) for additional advice.

If you are varying your permit, you should detail any existing operating techniques (as listed in table S1.2 of your permit) that are subject to change by the application being made and demonstrate how they will meet any relevant BAT. Note any new equipment or activities are likely to need to meet any new and relevant BAT standards.

Amenity management plans

You must read our guidance on how to [control and monitor emissions for your environmental permit](#).

This includes guidance on controlling pollution from odour, dust, noise, pests and other 'fugitive emissions' (emissions without set emission limits).

You may be required to produce standalone management plans to demonstrate how you will control and monitor emissions. These will be assessed as part of your application. For odour and dust, we can supply a management plan template. The templates have been designed to cover the aspects of your operations that we will assess. You do not have to use this template, but if you do and provide all the information requested, it makes it more likely your plans will be accepted. You should contact the following teams to request a copy the template:

- Odour: odourteam@environment-agency.gov.uk
- Dust: air.quality@environment-agency.gov.uk

For activities where dust and or odour has the potential to be a high risk, we have included the relevant templates with this advice. You may need to pay an additional charge for the assessment. Further information on this is included in the 'How much will my permit cost' section above.

This also applies to variations which may lead to an increase in emissions as a result of the changes being proposed.

We have included additional notes below on specific considerations for noise impact assessments below.

Risks from Noise and Vibration, Industrial and Commercial Sound and Noise Management Plans

If your risk assessment shows your operation is likely to cause pollution from noise or vibration beyond your site boundary you must [provide a noise impact assessment](#) (NIA) based on BS4142:2014+A1:2019 – 'Methods for rating and assessing industrial and commercial sound'.

Where your assessment has used calculations or modelling to predict sound pressure levels at receptors, you must follow our [guidance on the presentation of your acoustic data: Noise impact assessments involving calculations or modelling](#).

We have attached some supplementary advice on producing a NIA.

Your NIA must be accompanied by a [Noise Management Plan](#) based on the results of your NIA. We have attached a template to help you produce a noise management plan.

Fire Prevention Plan (FPP)

If you store combustible wastes at your site you need to provide an FPP. You must follow our [guidance on Fire Prevention Plans](#). This tells you what to include in your

FPP and the fire prevention measures you must put in place. We have also produced a template to help you prepare your plan.

If you are varying your permit and this will lead to an increased fire risk, then a new or updated plan will be required.

Accident prevention and management plan

Your EMS should include a plan for dealing with any incidents or events that could result in pollution. This should follow our [guidance on producing an accident prevention and management plan](#). If applying for a variation, you may need to update this plan to incorporate the proposed changes.

Technical Competence

If your activities include waste management, you must meet [legal operator and competence requirements](#). You will need to send in evidence of appropriate technical competence for the proposed activities (or in the case of variations, the proposed changes). You will need to include valid certificates or other acceptable evidence.

Site condition report

For new bespoke permits or variations to increase the area of your facility you should send us a site condition report which covers the area that will be covered by the permit. This should be in line with our guidance [H5 Site condition report – guidance and templates](#).

This needs to include a conceptual site model and identify any relevant hazardous substances on site. Quantitative baseline soil and groundwater monitoring data on the condition of the site should be included or a justification on why this is not required should be provided. You should also consider if you need to undertake soil gas monitoring.

Water Discharges

If your application will include water quality discharges which form part of the same installation facility you must complete the installation application forms and water quality application forms. If the discharge is standalone (not technically linked to the installations facility) on another separate permit you can access pre-application advice [here](#) or follow the guidance [here](#).

Waste Activities and Exemptions

If you require pre-application advice about a standalone waste activity, then you can access advice [here](#). If the waste activity will be included with your installations permit application, and is not a directly associated activity, you should follow the guidance [here](#) and complete application form's part [B4](#) or [B1](#) as appropriate.

Waste exemptions allow low-risk waste management operations to be carried on without an environmental permit. Waste exemptions cannot be carried out at installations. Future reforms to waste exemptions will also mean exemptions cannot be registered at or adjacent to (where there is a direct link) permitted installations. For further details read [Waste Exemptions – Getting Ready for Change](#).

Other permissions required

The above advice covers installations activities only. Other permissions from the Environment Agency and/or other bodies may be required for your activity or if you carry out any associated or additional activities, for example:

- [List of activities that need an environmental permit](#)
- [If you abstract or impound water](#)
- [Planning permission](#)
- [If you work on or near a river, flood defence or sea defence](#)

Submitting an application

Please submit your application by email or, if applicable, by using the online form as detailed in the ‘How do I apply for a new permit?’ section above.

Application Timescales

Our current queues are large, and we are taking longer than usual to allocate work for initial assessment, known as duly making. The table below shows our estimated queue times by application type. Please note, this is based on our average times and some applications may be picked up before or after the timescales listed below.

Application type	Estimated time to allocation
New bespoke	30-32 weeks
New standard rules	30-32 weeks
Admin variation	2-6 weeks
Minor variation	12-16 weeks
Normal variation	30-32 weeks
Substantial variation	30-32 weeks
Transfer	10-14 weeks
Surrender	9-13 weeks
Medium Combustion Plant	10-14 weeks

Once an application is duly made, the amount of time taken to determine your application will vary. It will be impacted by factors such as:

- The quality of the application
- The complexity of the application
- Whether an application is of high public interest

- Whether the application includes novel technologies or techniques
- Whether the determination requires input from others, both internal and external to the Environment Agency
- Whether modelling and/or monitoring and assessment is required, for example Air Quality modelling and assessment

The Permitting Officer determining your application will be able to keep you updated with the progress of your application.

Appendix 3 - Supplementary biological treatment basic pre-application advice

This document provides supplementary basic advice for biological (biowaste) treatment activities and is in addition to the general advice document also provided. Biological treatment activities include; anaerobic digestion, composting (open windrows and in vessel composting), aerobic digestion and mechanical and biological treatment.

How much will my permit cost?

In addition to the information about application charges given in the general advice document, this section is intended to give more activity specific advice which might help you to provide the correct charge for your application.

Baseline charge

The application charge depends on the type of biowaste treatment activity that is proposed.

For **new bespoke applications** where the biowaste treatment activity is the primary activity, the application charges are as specified below:

- Section 5.3 (a)(i) - hazardous waste installation – biological treatment (charging ref. 1.16.1.1) – **£16,001**.
- Section 5.4 (a)(i) and (b)(i) - non-hazardous waste installation – biological treatment (charging ref. 1.16.2.1) – **£13,984**.

The charge will comprise the full application charge for the first activity and then 10% of the relevant application charge for the same activity carried out multiple times.

Where any of the activities above are carried out as a secondary activity to a higher charge paying activity (for example, a hazardous waste treatment activity), the application charge will comprise the full charge for the primary activity and 50% of the relevant application charge for any secondary activities that can reasonably be considered to be part of the same operation. Please see section 2.12 of the charging guidance.

Where a waste operation (non-listed activity) is being carried out as a secondary activity to any of the biowaste treatment activities, the application charge will comprise the full charge for the primary activity and 50% of the relevant application charge for the Waste operation activity.

The application charge for an associated Effluent Treatment Plant (ETP) that treats effluent derived from the biowaste treatment activity is 10% of the relevant application charge.

For variation applications, the charge will be dependent on the type of variation (minor technical, normal or substantial). The scope of the variation types are described in section 3 of our [charging guidance](#). The charges for each type of variation can be found in table 1.6 of our table of [Charging Scheme](#).

As described in our [charging guidance](#), the following points should be taken into account when calculating your variation charge.

1. If you want to vary a permit that covers more than one activity you must pay a variation charge for each activity you want to vary. If the change affects other activities on the same permit, that means they will also need to be changed. You will need to pay a variation charge for each of the other activities affected.
2. If you have a permit that covers the same activity multiple times, you pay a variation charge when changing each repeat activity. However, if you want to make the same change, at the same time, to a second or subsequent repeat activities, you do not need to pay another variation charge. This is because the changes to the second or subsequent repeat activities are regarded as administrative changes which are free of charge.
3. If you have a permit that covers multiple activities and you apply to change any plant or infrastructure (for example replacing the boilers, or extending the site boundary), you pay the highest variation charge of the activities affected. Any changes to the other activities are then regarded as administrative variations and will be free of charge. This applies if it is a minor, normal or substantial variation.
4. If you want to add an activity to your permit, you must pay the charge for a new permit application for that type of activity.

Add-on charges

We have identified odour emissions, pests, fire, noise and dust emissions as key issues for these activities. Depending on the findings of your risk assessment, it is possible that some or all of the following add-on charges may apply in addition at the baseline application charge:

- Odour management plan – a fixed charge of £1,246.
- Noise and vibration management plan – a fixed charge of £1,246.
- Emissions management plan (dust) – a fixed charge of £1,241.
- Pests management plan – a fixed charge of £1,241.
- Fire prevention plan – a fixed charge of £779.

Supporting information specific to biological treatment activities

Technical description and BAT assessment

The application should contain the following technical aspects:

- A demonstration of BAT measures should be provided with sufficient evidence justifying that BAT has been applied for example, treatment technology, equipment choice, abatement technology, energy efficiency, raw material usage.

The operational procedures should comply with the Waste Treatment BAT Conclusions as described in the Commission Implementing Decision¹ and the BAT Reference Document for Waste Treatment (the BREF)².

It would be helpful to present the BAT assessment in a tabular format – a comparison of the relevant BAT points and how the installation complies with the BAT points.

- Any departure from the Waste Treatment BREF /BAT Conclusions should be fully justified in the application. Where needed, a cost benefit analysis of different options, in line with Environment Agency Guidance should be provided: <https://www.gov.uk/guidance/best-available-techniques-environmental-permits>
- A description of the abatement techniques for all necessary substances and receptor media
- An assessment of energy usage /efficiency techniques
- Monitoring frequencies, standards and proposals including MCERTS
- Raw materials inventory and annual throughput
- Raw material usage efficiency techniques
- Raw material storage arrangements
- Digestate /compost storage capacity and contingency plans
- List all the waste codes proposed for the facility, using the EWC Catalogue. Justification for the use of 99 codes must be provided where appropriate.
- A description of the proposed waste handling (including storage and segregation).
- A review of waste minimisation at the facility.

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018D1147&from=EN>

² http://eippcb.jrc.ec.europa.eu/reference/BREF/WT/JRC113018_WT_Bref.pdf

Odour Management Plan

As set out in our [guidance on controlling odour emissions](#), we consider biological treatment activities as high risk for odour. This means that for new application you need to provide a standalone Odour Management Plan (OMP) for assessment. Particular attention must be paid to odour containment, effectiveness of abatement plant and design and you should follow the [H4 guidance](#)

We have provided you with a copy of our OMP template with this advice. The template has been designed to cover the aspects of your operations that we will assess. You do not have to use this template, but if you do and provide all the information requested, it makes it more likely that your OMP will be accepted.

The template is periodically updated and improved. If there is delay between you receiving the template as part of your pre-application advice and you preparing your plan for a permit application, we recommend you contact the Environment Agency odour team to request the most up-to-date version of the OMP template. You can request the template from odourteam@environment-agency.gov.uk

For **variation applications**, a new or updated plan will be required if your risk assessment shows that the changes will lead to increased odour risk.

Primary and secondary containment

A detailed assessment of site infrastructure should be provided (e.g. secondary containment, tank specification, surfacing, storage lagoon etc.). The site infrastructure should be compared with the relevant industry /construction standards (e.g. CIRIA guidance C736 for secondary containment and C535 for above-ground tanks etc.).

The assessment should include:

- The physical condition of primary containment systems (storage and treatment vessels), secondary containment (bunds), loading and unloading areas, transfer pipework/pumps, temporary storage areas and liners underlying the site.
- The suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure;
- Any work required to ensure compliance with the industry standards or equivalent; and
- A preventative maintenance and inspection regime for site infrastructure.

Dust

As set out in our [guidance on controlling dust, mud and litter](#), we consider biological treatments activities as high risk for dust and particulates. This means that

depending on the outcome of your risk assessment you may need to provide a standalone Dust Management Plan (DMP) for assessment.

A DMP template is available. The template is periodically updated and improved. We recommend you contact the Environment Agency air quality team to request the most up-to-date version of the DMP template. You can request the template from air.quality@environment-agency.gov.uk

Bioaerosols risk assessment

A bioaerosols site-specific risk assessment (SSBRA) will be required where:

- The operational area including abatement plant is located within 250 metres of sensitive receptors; or
- Where area or point source emissions may pose a risk to the nearest sensitive receptor's location.

The SSBRA must demonstrate that the process and/or abatement measures adequately prevent or where this is not possible significantly reduce the risk of bioaerosols release and that the resulting activity will be unlikely to expose the nearest sensitive receptor to elevated concentrations of bioaerosols. The detail and level of risk assessment must be site specific, process and location dependant. To control and minimise the risks identified, measures and process controls must be in place and clearly stated.

There is an additional charge associated with the assessment of bioaerosols risk assessment.

Link to technical guidance:

<https://www.gov.uk/government/publications/bioaerosol-monitoring-at-regulated-facilities-use-of-m9-rps-209>

<https://www.gov.uk/government/publications/m9-environmental-monitoring-of-bioaerosols-at-regulated-facilities>

Process flow diagrams

The application should contain process flow diagrams for treatment processes on site.

List of wastes

Waste streams which are considered acceptable are specified in the anaerobic digestion and composting standard rules permit templates on GOV.UK. Any other waste streams should be accompanied by a robust justification which is in accordance with the Environment Agency Framework for assessing suitability of wastes going to anaerobic digestion, composting and biological treatment, Framework Guidance Note (2013).

