

# **Permitting decisions**

#### **Bespoke permit**

We have decided to grant the permit for Seaham Plastics Recycling Facility operated by Biffa Waste Services Limited.

The permit number is EPR/GB3905TX.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

#### Purpose of this document

This decision document provides a record of the decision making process. It:

- summarises the decision making process in the <u>decision checklist</u> to show how all relevant factors have been taken into account
- shows how we have considered the <u>consultation responses</u>.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

### **Decision checklist**

Aspect considered	Decision	
Receipt of application		
Confidential information	A claim for commercial or industrial confidentiality has not been made.	
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on confidentiality.	
Consultation		
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.	
	The application was publicised on the GOV.UK website.	
	We consulted the following organisations:	
	<ul><li>Local Authority Environmental Health; and,</li><li>Food Standards Agency.</li></ul>	
	The comments and our responses are summarised in the consultation section.	
Operator		
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.	
The facility		
The regulated facility	We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1'.	
	The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.	
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. The plan is included in the permit.	
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports.	
	The bedrock underlying the site is classified as a Principal Aquifer. The south and west portions of the site lie within a Source Protection Zone 3.	

Aspect considered	Decision
	The site lies within an area known for groundwater vulnerability classified as a Minor Aquifer Low and within a Flood Zone 1.
	The entire site area has an impermeable surface, and all clean site surface water will drain through a bypass separator into an attenuation tank before release from site to the surface water drain.
Biodiversity, heritage, landscape and nature conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.
	We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.
	We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.
	We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.
Environmental risk asse	ssment
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory.
	Noise Due to the close proximity of residential dwellings, a noise impact assessment was requested and assessed as part of our determination. The consultant undertook a BS4142 noise assessment to assess the impact of noise emitted from their proposed plastics recycling facility.
	We have reviewed the consultant's assessment and made a number of observations. We identified that the operation of the site could result in a significant adverse impact during night time operations. However, it was concluded that excluding the noise from the two external chiller units, the noise impact would be expected to be around the background level for the nearest receptors.
	As a result, we are satisfied that the site poses a low risk to receptors excluding the use of the chillers. We have included a pre-operational measure for the future use of the chiller units which requires the operator to provide further evidence to demonstrate that the chillers can be used without an adverse impact on receptors, prior to use.
	Dust The nearest residential receptors are located approximately 70 m to the north east of the site. The operator has identified the management methods they will use to mitigate potential dust emissions within the Environmental Risk Assessment submitted with the application (reference: Seaham Plastics Recycling Facility Environmental Risk Assessment, dated: December 2018).
	<ul> <li>To prevent dust impacting on the nearest receptors, the operator shall use the following methods:</li> <li>Waste plastics will arrive on site as bales of whole plastic bottles which are not inherently dusty materials.</li> </ul>

Aspect considered	Decision
	<ul> <li>Waste will arrive within sheeted or enclosed vehicles if possible to ensure no escape of dust during transit.</li> <li>The main reception building has roller action doors which will be kept closed when deliveries of waste are not taking place.</li> <li>All waste processing will take place within the main building.</li> <li>Small amounts of waste will be stored in skips within the yard area. The skips will be further contained within a 3-sided, roofed enclosure.</li> <li>A dust extraction system will be fitted to the processing plant housed within the processing building. All dust will be collected in bags and disposed of at a suitably licenced facility.</li> <li>A speed limit will be implemented on site to minimise the mobilisation of dust particles.</li> <li>Drop heights will be minimised to prevent emissions of dust.</li> <li>The site will be subject to periodic clean downs to minimise the build-up of dusty particles, and site surfacing will be maintained in good condition to minimise the mobilisation of dust particles.</li> <li>Site operatives will carry out ongoing visual monitoring throughout working day to identify unacceptable dust levels. Any potential emissions of dust shall be reported to the Site Manager.</li> <li>If dust becomes an issue, or complaints are received, an investigation to establish the cause will be undertaken and action taken.</li> </ul>
	We are satisfied that there is a low risk of dust from the permitted activity resulting in pollution beyond the permit boundary. Should the site activities be found by the Environment Agency to cause dust pollution when operational, conditions 3.1.1 and 3.1.2 of the permit would require the Operator to submit an emission management plan, which
	identifies and minimises the risk of dust. <u>Discharge to Sewer</u> All effluent will be treated by an onsite dedicated Dissolved Air Floatation (DAF) unit to purify the effluent. The DAF plant will correct the pH before discharge as well as reduce the Suspended Solids, Chemical Oxygen Demand (COD) and fats, oils and grease.
	The discharge of the effluent will have a maximum daily output of 150m <sup>3</sup> . The activity has a discharge consent agreed by Northumbrian Water (registered number W1416), for discharge to the Seaham Sewage Treatment Works (permit reference 255-1125). The Seaham Sewage Treatment Works discharges to the North Sea, over 1 kilometre from the coastline, and with a discharge depth below 16 metres Ordnance Datum Newlyn. The effluent discharge from the plastics recycling facility is expected to constitute approximately 1% of the final discharge from the sewage treatment works to the North Sea.
	The Operator has provided data on potential contaminants in the sites effluent discharge which is based on the machine manufacturers 'indicative characteristics' and analysis of water samples from a similar process (reference: Form G/02: Trade effluent discharge notice).

Aspect considered	Decision
	We have reviewed the data, and used additional conservative assumptions, to assess the level of risk of the discharge using the Environment Agency's H1 tool. The assumptions used for the risk assessment include:
	<ul> <li>The sewage treatment reduction factors have not been applied, to provide a very conservative assumption;</li> <li>The maximum effluent flow rate is 2 litres per second;</li> <li>The background concentration for each substance was assumed to be close to zero for the most conservative assumption;</li> <li>The discharge location in the North Sea is not a location with restricted dilution or dispersion characteristics, and the discharge is more than 50m from the shoreline;</li> <li>The discharge is not negatively buoyant, as it is predominantly freshwater being discharged into seawater; and,</li> <li>The water release depth below chart datum is 16m, as stated in the permit for Seaham Sewage Treatment Works (permit reference 255-1125).</li> </ul>
	The results show that the substances would screen out either due to the substances being lower than the relevant Environmental Standards (Test 1 for TRaC waters, as stated in the online risk assessment guidance), or due to the Effective Volume Flux being a small proportion of the Allowed Volume Flux (Test 5 for TRaC waters, as stated in the online risk assessment guidance).
	We are satisfied that the risk is expected to be low, should the effluent quality match the assumptions provided. We have included an improvement condition (IC1 of Table S1.3 in the permit), which requires the Operator to monitor the effluent discharge, and complete a H1 assessment based on the analysis. This must be completed within 6 months of the permit being issued. Should the results of the H1 indicate that there could be an environmental impact then the Operator must propose further methods to reduce the impact.
Operating techniques	
General operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.
	The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.
	Effluent Treatment Plant The Effluent Treatment Plant is to be regulated as an installation activity (S5.4 A (1)(a)(ii) Activity listed in Schedule 1 of the Environmental Permitting Regulations). As an installation, the operator has had to demonstrate that the activity will meet Best Available Techniques.
	We have assessed the proposal against BAT set out in the Sector Guidance Note 5.06 Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste, and the Best Available Techniques (BAT) Reference Document for Waste Treatment, 2018.
	The operator has demonstrated that the ETP shall meet the following BAT:

Aspect considered	Decision
	<ul> <li>The emissions have been assessed using the H1 tool, and an improvement condition is in place to revise the H1 tool using monitoring data from the site once operational.</li> <li>Chemical Oxygen Demand (COD) shall be reduced by the DAF plant and shall be regularly monitored to ensure it meets the 2500mg/l limit within the discharge consent.</li> <li>Visual checks will be made on the effluent to determine that it is free from oil. A sample will be taken at least daily for a minimum of a visual inspection.</li> <li>The ETP will be checked at shift start to ensure that it is operating as required, this will be recorded in the handover shift log. The unit will also be subject to routine preventive maintenance as per the manufacturers recommendations, this maintenance will be recorded on the Maintenance Management System.</li> <li>There is a flow meter to monitor the process flow. Effluent will also be monitored on a routine basis for pH, suspended solids and COD. The sampling location will be at the outlet of the DAF unit as this will be representative of the post-treated effluent that will be discharged into the sewer.</li> <li>Prior to the effluent treatment, the process benefits from a 10m<sup>3</sup> pre-treatment storage tank. In the event of a breach of specification this tank can be used as a 'buffer' for storage of effluent until corrective actions can be made to restore the effluent back into the allowed specification.</li> <li>A proportion of the process water will be recycled in the process.</li> <li>The BAT emission limits for indirect discharges, as stated in the Best Available Techniques (BAT) Reference Document for Waste Treatment far exceed the estimated emissions from the site.</li> </ul>
Fire prevention plan	We have assessed the fire prevention plan and are satisfied that it meets the measures and objectives set out in the Fire Prevention Plan guidance. The permit for the treatment of waste plastic needs to control the waste treatment activities up to the point where the waste is a raw material. In this instance the permit needs to regulate the treatment process to produce the waste plastic flack.
	The Operator has confirmed that the waste flack produced following treatment shall have a specification in line with WRAP Quality protocol on Non-Packaging Plastics, and the standard of the material following treatment will meet the British Standard BS EN 15348:2014 (reference: Schedule 5 Notice response, dated 31/05/19).
	Given that this material is expected to meet end-of-waste requirements, we would consider this to be raw material following the treatment process. As such we have treated this material as non-waste for the purpose of the Fire Prevention Plan. The storage of this material is still included within the permit boundary and is subject to the conditions of the permit.

Aspect considered	Decision
Permit conditions	
Waste types	We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.
	We are satisfied that the operator can accept these wastes for the following reasons:
	<ul> <li>they are suitable for the proposed activities</li> <li>the proposed infrastructure is appropriate</li> <li>the environmental risk assessment is acceptable.</li> </ul>
	We made these decisions with respect to waste types in accordance with guidance on the classification and assessment of waste (version 1.1 May 2018) Technical Guidance WM3.
Pre-operational conditions	Based on the information in the application, we consider that we need to impose a pre-operational condition for the future use of the chiller units.
	This requires the operator to submit further evidence on the noise impact, prior to use of the two chiller units. The requirements for this pre-operational condition can be seen in full in Table S1.4 of the permit.
Improvement programme	Based on the information on the application, we consider that we need to impose an improvement programme.
	This requires the operator to submit a risk assessment to demonstrate that the effluent discharge to sewer has an acceptable level of risk. The risk assessment must use information obtained from monitoring of the effluent discharge and chemical analysis. The requirements for this improvement condition can be seen in full in Table S1.3 of the permit.
Emission limits	We have assessed the proposed discharge of effluent to sewer against the indirect discharge limits stated in the Waste BREF. We do not deem it necessary to include the limits in the permit. However the operator is required to review the need for monitoring as part of improvement condition IC1 (table S1.3 of the permit).
	The operator shall monitor the flow, pH, suspended solids and Chemical Oxygen Demand (COD) as a best available technique. The maximum daily discharge of 150m <sup>3</sup> has been included in the permit. The limits for the pH, suspended solids and COD will not be included in the permit as they are limits within the discharge consent.
Monitoring	We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.
	The Operator shall monitor the maximum daily discharge from the Effluent Treatment Plant to sewer to ensure it does not exceed the daily limit of 150m <sup>3</sup> . Any change to increase this limit will require the permit to be varied, and a further risk assessment to be completed.
Reporting	We have specified reporting in the permit. The operator is required to report:
	The maximum daily effluent discharge volumes;

Aspect considered	Decision
	<ul><li>The annual water usage of the site; and,</li><li>The annual energy usage of the site.</li></ul>
	This reporting is in accordance with BAT for the sector, as established in Sector Guidance Note 5.06.
Operator competence	
Management system	There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.
	The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
Technical competence	Technical competence is required for activities permitted.
	The operator is a member of an agreed scheme.
	Mr Chris Murphy is registered for the WAMITAB Level 4 Medium Risk Operator Competence for Non-Hazardous Waste Treatment and Transfer (MROC1).
	We are satisfied that the operator is technically competent.
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared.
	No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.
	Paragraph 1.3 of the guidance says:
	"The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation."
	We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.
	We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of

Aspect considered	Decision
	pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

## Consultation

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public, and the way in which we have considered these in the determination process.

We received no responses from organisations listed in the consultation section. We received one response from an individual member of the public that did not identify any environmental concerns or issues over the proposed activities.